North Tahoe Parking Study

Prepared for the

County of Placer

Prepared by

TRANSPORTATION CONSULTANTS, INC.

LSC Transportation Consultants, Inc.

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Chapter 1
Introduction

How a jurisdiction provides and regulates parking is a difficult balancing act, with substantial ramifications to the attractiveness of communities and their economic viability. If insufficient parking is required, conflicts between individual property owners can be exacerbated by overflow parking patterns, traffic congestion (and associated noise and air emissions) can be unnecessarily increased, and driver frustration can reduce a commercial center's reputation as an enjoyable and convenient location to shop and dine. On the other hand, requiring too much parking can result in substantial increases in development cost (which in some cases may well make redevelopment infeasible), unnecessary surface coverage that impacts water quality and visual attractiveness, as well as running counter to regional goals of encouraging non-auto travel.

This issue is particularly important in the Tahoe Region, given the goals of minimizing coverage as well as the importance of providing compact, walkable communities. The small lot size in much of the commercial core areas further limits opportunities for private on-site parking and increases the importance of public parking.

Placer County, building on the recent adoption of the updated Tahoe Regional Planning Agency (TRPA) Regional Plan, has embarked on the update of the Community Plan for the entire Tahoe Basin portion of unincorporated Placer County. The County is also actively pursuing economic development strategies in the region. Through these processes, parking has emerged as a key issue, particularly in the commercial centers of Tahoe City and Kings Beach. LSC Transportation Consultants, Inc. was retained by Placer County to conduct this study. Key outcomes of this study are:

- An update to the parking requirements for various land use classifications, based upon the most recent available information both locally and nationally regarding parking use.
- A review of parking design standards.
- An assessment of public parking financing and implementation strategies, including in lieu fee programs.
- A coordinated approach to parking for purposes of the new Community Plan, as well as to guide economic development efforts.

As detailed in the following chapters, this work is grounded on a detailed review of existing parking inventory and utilization in the Tahoe City and Kings Beach commercial core areas, a "peer review" of parking in similar mountain resort communities, and a review of current parking management literature.

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Chapter 2
Review of Previous Studies and Planning Processes

Parking is far from a new issue in the study area. To provide a context for the current study, the following are summaries of previous parking studies, as well as a review of parking-related findings generated through recent broader planning and economic development efforts.

Previous Parking Studies

Kings Beach Commercial Core Parking Study, July 5, 2000, LSC Transportation Consultants, Inc.

The study identified a total of 1,818 parking spaces in the commercial core area (between SR 267 and Chipmunk Street, excluding the Brockway Road area), consisting of 309 onstreet spaces, 66 informal off street spaces in vacant lots, and 1,443 formal spaces in off-street lots. Parking counts were conducted on Saturday August 20, 1999. As this date is after the peak summer period, counts were factored up based upon traffic count information to estimate peak summer parking utilization of 1,052 vehicles, or 58 percent of all available parking. The only subareas where use met or exceeded supply were on the south side of SR 28 between Deer Street and Bear Street (116 percent peak utilization) and on the south side of SR 28 between Bear Street and Coon Street (126 percent peak utilization).

This study also included an evaluation of future public parking needs. This previous study was based upon an estimate of 24,000 square feet of future retail development, of which 25 percent of parking needs would be met off-site in public parking facilities, and indicated a need for an additional 20 public spaces to support future development. It also evaluated the impact of the urban improvement project (as it was then envisioned) on on-street and off-street spaces. Including a desired maximum of 95 percent utilization, and considering that adequate new/replacement parking should be available within a one-block walk of all portions of the commercial core, the study indicated a total need for 84 additional parking spaces.

Update of Tahoe City Public Parking Facilities Construction Development Program, April 2003, by Gordon H. Chong & Partners Architecture and Walker Parking Consultants

This study included parking counts in the Tahoe City core area between the Wye and the Lighthouse Center, conducted on Thursday July 6 and Saturday July 8, 2000. The study excluded Commons Beach, the 64 Acres area, SR 89 northwest of the Wye, and the Lake Tahoe School parking lot. The inventory totaled 1,648 off-street spaces and 187 onstreet, for a total of 1,835 spaces. An important finding of the inventory review is that only 15 percent of all parking spaces were fully open to the general public (with no restrictions on who may park).

Overall, the counts indicated a peak occupancy of 70 percent (in the 2 PM hour), with 75 percent occupancy in the onstreet spaces and 69 percent in the off-street spaces. Of the six sub-areas, none were found to reach or exceed capacity area-wide. The highest occupancy was observed in the area bounded by Cobblestone on the southwest and Grove Street in the northeast, at 90 percent. The second-busiest area was the area southeast of SR 28 between Tahoe City Library on the southwest and the Lighthouse Center on the northeast side, with a maximum utilization of 81 percent.

The study included a planning-level (no detailed engineering) study of new or expanded parking lots at the State Recreation Area, on Mackinaw Road, at the lower TCPUD yard, at the Jackpine site, at the Grove Street site and at 64 Acres. The evaluation of Grove Street lot expansion included options to extend westward to the Cobblestone. New structured parking was considered for the Grove Street site, Henrikson property, Tahoe Marina, Boatworks Mall, and the Williamson Property.

Tahoe/Placer County Parking Improvement District Study, Public Draft Report, May 4, 2006, by LSC Transportation Consultants, Inc.

This study focused on the potential for an in lieu parking fee program for the Kings Beach and Tahoe City areas, in which some or all of the parking requirements of a future development could be met through payment of fees into a public parking program, rather than on-site provision of parking. It included a summary of current parking conditions (based on previously-conducted counts). This review indicated that 38 of 73 commercial developments in Kings Beach (52 percent) did not provide the number of onsite parking spaces required by County Code. An estimate of potential increase in parking demand was conducted, assuming 69,400 square feet of future retail/restaurant development in Kings Beach and 55,000 square feet in Tahoe City (at 75 percent retail / 25 percent restaurant), resulting in a total of 312 additional spaces in Kings Beach and 248 in Tahoe City.

The document includes a detailed review of existing in-lieu fee programs in California (including Berkeley, Brentwood, Carmel, Concord, Culver City, Davis, Fairfield, Laguna Beach, Manhattan Beach, Mountain View, Palo Alto, Sacrament, Salinas, San Jose, Truckee, and Walnut Creek), as well as Davie, Florida; Bend, Oregon; Corvallis, Oregon; and Jackson, Wyoming. It applied a set of eight guidelines regarding the viability/desirability of an in lieu fee program to conditions in the two commercial core areas. Of these, all eight were found to be met in Kings Beach, while in Tahoe City five of the eight were fully met and three were partially or provisionally met. It recommended establishment of a fee program in Kings Beach, and provisionally recommended a program in Tahoe City depending on the identification of a sufficient number of reasonably-foreseeable development projects as well as the identification of a public parking site or sites that can serve expected developments.

Economic & Redevelopment Strategies for Kings Beach and Tahoe City California, Final Report June 2007, by Economic & Planning Systems, GDeS Architecture & Planning, Hansford Economic Consulting, and Denise Duffy & Associates

This study focused on overall economic strategies for the two commercial core areas, including general recommendations for parking strategies. The report, based upon conditions in 2007, stated that "The lack of adequate, visible and convenient parking in Kings Beach is evident throughout the community." (p11). It indicates that that the strategy of small lots then being constructed in dispersed locations throughout the commercial core "is unlikely to provide the parking density required to support future development."[1] Recommendations regarding Kings Beach includes: "The County should consider identifying and pursuing partnerships with land owners or purchasing underutilized properties adjacent to Highway 28 for parking structures...These structures can be incorporated into larger mixed use projects, have highway visible entrances, and be nearly invisible from view." (p 50)

[1] This reflects that these areas are specifically intended to offset the loss of onstreet parking associated with the Commercial Core project.

Regarding Tahoe City, "The parking situation in Tahoe City is improving and is sufficient for the current level of activity. When retail vacancies decrease and new development occurs, there will be insufficient parking for the increased activity. Compact parking structures which are visible from main streets and can accommodate several vehicles without a great deal of land coverage, will be necessary to support a revitalized commercial center." (p 59)

Spring 2013 Community Outreach Summary Report: Tahoe City Golf Course Property (Freshtracks Communications)

This document summarizes the results of two public workshops, written feedback forms, and an online survey conducted for a coalition of the Tahoe City Public Utility District, the Truckee Tahoe Airport District, Placer County and the North Lake Tahoe Resort Association. The purpose of the exercise was to gather public input on planning efforts for the Golf Course property, after it was acquired through a joint effort. The report notes that one of Placer County's purposes in participating in the acquisition was to improve parking and traffic circulation in the Tahoe City core area. As part of the process, two alternative parking expansion options were presented for additional parking in the northeast corner of the Golf Course area (along the "back side" of the commercial properties on the north side of SR 28 west of Grove Street. The report indicates that most attendees preferred the surface lot because it was less expensive and provided nearly as many spaces as a parking structure." (p8). Individual comments regarding the concept ranged from "more parking isn't needed" through "OK to add parking but no road of any type" to "extend parking lot connector all the way to Henrikson Property". The list of "next steps" for Placer County includes "complete analysis on parking lot options and funding" and "possible parking lot design and construction in two to five years."

Regarding potential development, the report indicates that "new retail development should be concerned primarily with replacing obsolete older space with new space. To the extent net new retail development is pursued, it should proceed on a selective basis, be predicated on careful consideration of market niche, and be paired with other land uses as to spur local demand and minimize development risk." (p 73, Market Opportunities and Constraints Final Report).

Tahoe City Visioning Process

In 2012 and 2013 a series of public meetings and workshops were held as part of the Community Plan Update process, focusing on the Tahoe City core area. A variety of parking options were discussed, including extension of the Grove Street Lot westward to provide a parking/circulation corridor as far west as the Cobblestone Shopping Center as well as additional "intercept" parking at either end of the commercial core. Key parking-related statements generated through this process consisted of:

"Encourage walkable retail at ground level with appropriate mixed use reinforcing main street vitality."

"Address peak period parking issues (e.g. cluster, add to a road between retail core and golf course)"

"The major parking areas are within the shopping centers near the lake. Parking should be located on the mountain side of the highway and behind the commercial uses."

(May 9, 2012 – Tahoe Community Plan Update - Tahoe City Plan Area Team)

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Chapter 3
Existing Parking Conditions

This chapter first presents an inventory of existing parking spaces in the two commercial cores. Next, the results of summer parking counts are presented and used to evaluate current parking utilization rates. Finally, parking turnover data is summarized.

Parking Inventory

Detailed parking inventories were conducted in both core areas. These count areas are depicted in Figures 1 and 2, for Kings Beach and Tahoe City, respectively. The areas were defined to encompass any "spillover" of commercial core parking into nearby residential areas were included in the counts. Parking inventory and use was not included for wholly-residential parcels, though mixed use parcels that include some residential uses are included. For unmarked on-street spaces, legal parking capacity was calculated by dividing total length of available curb space by 25 feet per vehicle.

Kings Beach

Table 1 presents the summary of existing parking supply in the Kings Beach commercial core area. As shown, there are a total of 1,763 parking spaces (including 93 public spaces temporarily in use for construction purposes). A key element of this inventory is that 58 percent are in private parking lots, 28 percent are along public streets (state highway or county roadways) and 13 percent are in public parking lots (including those owned by State Parks or Placer County).

Tahoe City

The existing parking supply in the Tahoe City commercial core is shown in Table 2. Of the total 2,586 parking spaces, 68 percent are in private lots (including 34 spaces temporarily in use for the renovation of the Lighthouse Center), 21 percent are in public lots, and only 11 percent are along public rights-of-way. This latter figure reflects the relative lack of local roadways, compared with Kings Beach. If the TCPUD and 64-Acre areas are excluded, the proportion of spaces in private lots increases to 76 percent. Overall, on a proportionate basis Tahoe City is substantially more dependent on private parking (particularly east of the Tahoe City Wye) than is Kings Beach.

Parking Utilization

Kings Beach

LSC staff conducted counts of parked vehicles throughout the study area on an hourly basis, from the 10 AM hour through the 6 PM hour over the course of a busy summer Saturday (July 19th, 2014). Detailed count data is presented in Appendix A, while Table 3 presents a summary of total vehicles by analysis district. A review of this data indicates the following:

- Overall parking use throughout the study area peaked in the 2 PM hour, at 1,347 vehicles. This equates to 81 percent utilization of all available parking spaces in the area (excluding spaces used temporarily for construction).

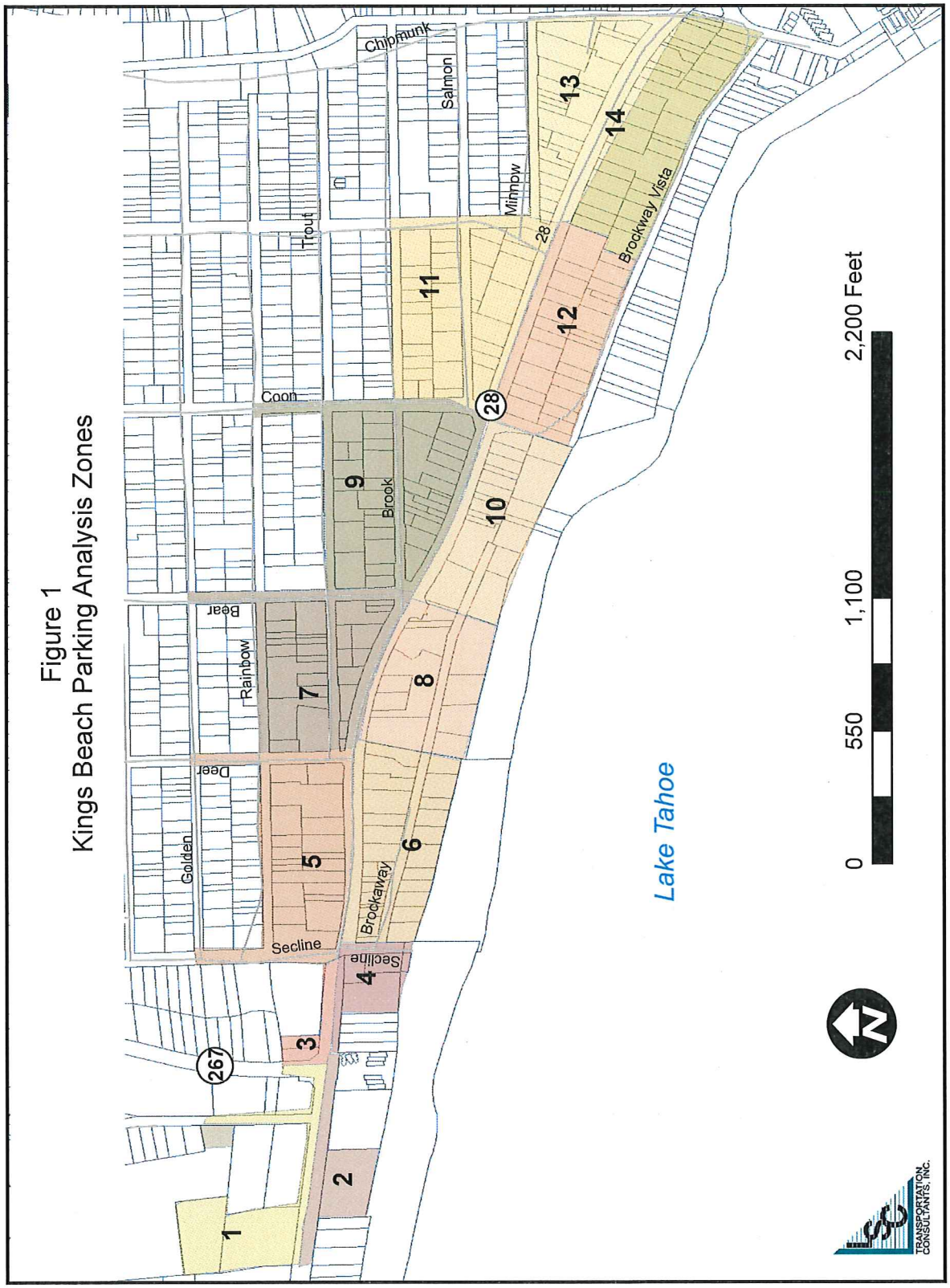
Figure 1
Kings Beach Parking Analysis Zones
Chipmunk
Salmon
Minnow
Trout
Coon
Bear
Rainbow
Deer
Golden
Secline
Brockway
Brockway Vista
Brook
Lake Tahoe
1
2
3
4
5
6
7
8
9
10
11
12
13
14
267
28
0
550
1,100
2,200 Feet
N
LSC
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Figure 2
Tahoe City Parking Analysis Zones

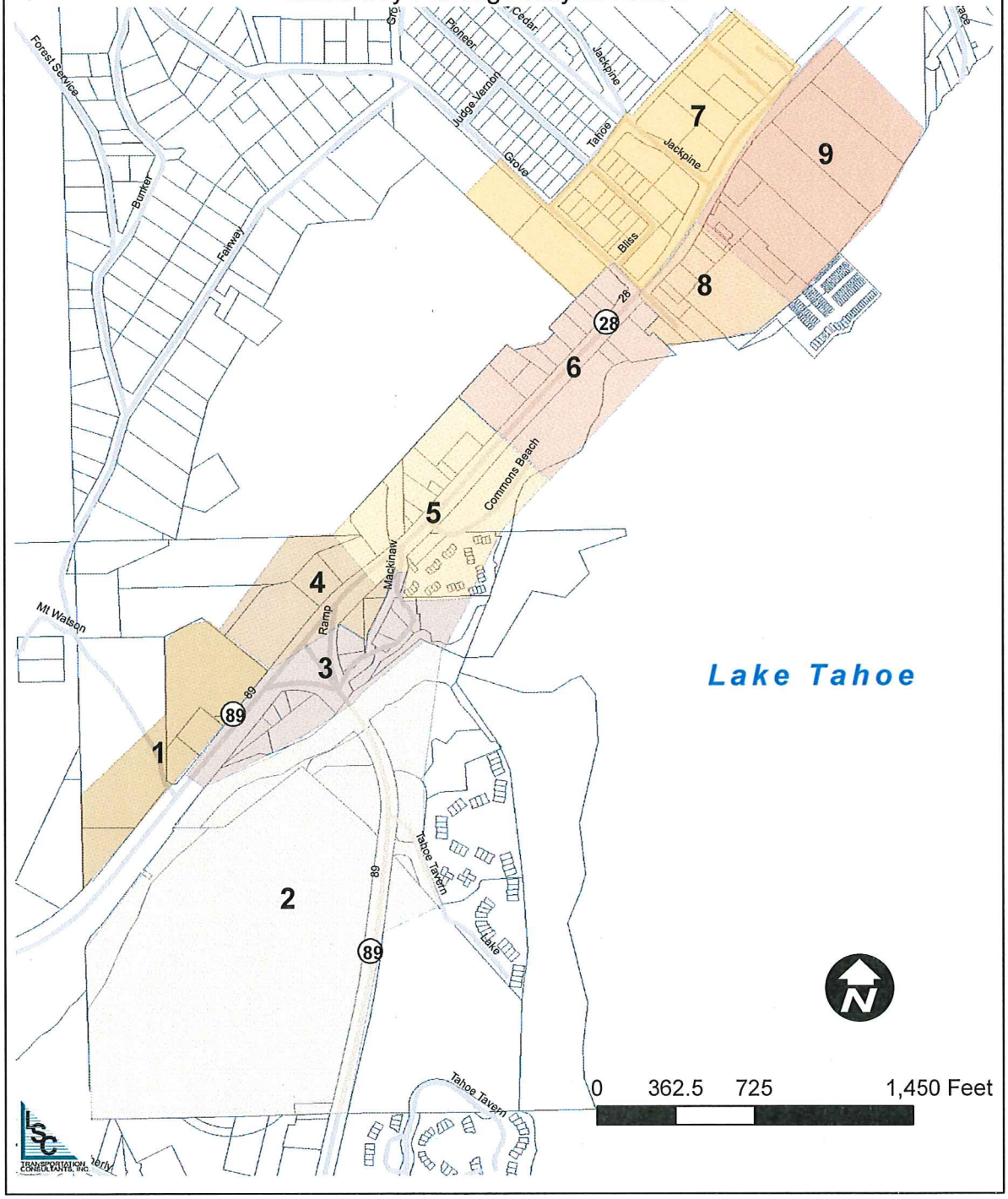

TABLE 1: Kings Beach Existing Parking Supply by Parking District

(Excluding Residential Properties)

Parking District	Description	Number of Parking Spaces: Highway Right-of-Way	Local Street Right-of-Way	Public Lots	Private Lots	Total Parking Spaces
1	Safeway and Brockway Golf Course	0	0	0	233	233
2	North Tahoe Beach	0	0	37	0	37
3	267 to Secline North of 28	11	0	0	21	32
4	267 to Secline South of 28	0	15	0	6	21
5	Secline to Deer North of 28	0	62	0	125	187
6	Secline to Deer South of 28	5	8	0	153	166
7	Deer to Bear North of 28	12	74	0	70	156
8	Deer to Bear South of 28	0	0	76	42	118
9	Bear to Coon North of 28 (1)	8	58	20	113	199
10	Bear to Coon South of 28 (2)	32	0	66	0	98
11	Coon to Fox North of 28 (3)	10	93	0	74	177
12	Coon to Fox South of 28	7	17	0	66	90
13	Fox to Chipmunk North of 28	25	22	22	39	108
14	Fox to Chipmunk South of 28	22	30	0	52	104
TOTAL		**132**	**379**	**221**	**994**	**1,726**
Total Percent		8%	22%	13%	58%	100%

Note 1: 16 local street spaces in construction zone.
Note 2: 66 public spaces in use for construction staging.
Note 3: 11 local street spaces in construction zone.

TABLE 2: Tahoe City Existing Parking Supply by Parking District

(Excluding Residential Properties)

Parking District	Description	Number of Parking Spaces: Highway Right-of-Way	Local Street Right-of-Way	Public Lots	Private Lots	Total Parking Spaces
1	TCPUD	0	32	0	85	117
2	64 Acres and S of Truckee River	0	0	295	67	362
3	South Wye Area	0	0	40	183	223
4	North Wye Area	0	0	0	241	241
5	Commons Beach Area - Both Sides of 28	32	0	73	195	300
6	Mid Tahoe City to Grove Street	48	0	0	172	220
7	North of SR 28, East of Grove Street	37	88	142	187	454
8	Tahoe City Marina Area	12	0	0	177	189
9	Safeway and Boatworks Area 1)	24	0	0	456	480
TOTAL STUDY AREA		**153**	**120**	**550**	**1,763**	**2,586**
Total Percent		6%	5%	21%	68%	100%

Note 1: 34 spaces in construction zone at Lighthouse Center.

Tahoe City Parking Count Results.xlsx

TABLE 3: Kings Beach Estimated Peak Summer Parking Utilization by Parking District and Time of Day

(Excluding Residential Properties) Saturday, July 19, 2014

District	Description	Total Available Parking Spaces (1)	Number of Spaces Occupied 10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	Maximum Spaces Occupied	Maximum Supply Minus Demand	Maximum Percent Utilization
1	Safeway and Brockway Golf Course	270	226	246	243	243	226	217	204	211	228	246	24	91%
2	North Tahoe Beach	37	**45**	**45**	**41**	**40**	**43**	**42**	37	22	25	**45**	**-8**	**122%**
3	267 to Secline North of 28	32	19	26	22	26	28	23	21	18	18	28	4	88%
4	267 to Secline South of 28	21	12	20	**29**	**23**	**22**	21	**22**	12	8	**29**	**-8**	**138%**
5	Secline to Deer North of 28	187	66	67	93	102	108	113	85	67	59	113	74	60%
6	Secline to Deer South of 28	166	105	98	115	123	122	138	136	133	125	138	28	83%
7	Deer to Bear North of 28	156	36	58	77	107	128	96	84	69	61	128	28	82%
8	Deer to Bear South of 28	118	101	105	112	109	109	112	96	100	96	112	6	95%
9	Bear to Coon North of 28	183	68	93	116	124	122	107	92	81	64	124	59	68%
10	Bear to Coon South of 28	32	10	23	**38**	**38**	**40**	**39**	25	20	19	**40**	**-8**	**125%**
11	Coon to Fox North of 28	166	35	81	111	115	124	100	73	43	42	124	42	75%
12	Coon to Fox South of 28	90	53	88	**99**	**98**	**106**	87	86	63	24	**106**	**-16**	**118%**
13	Fox to Chipmunk North of 28	108	26	30	57	76	80	70	61	63	**110**	**110**	**-2**	**102%**
14	Fox to Chipmunk South of 28	104	35	28	56	80	89	95	73	57	46	95	9	91%
TOTAL STUDY AREA		*1,670*	*837*	*1,008*	*1,209*	*1,304*	*1,347*	*1,260*	*1,095*	*959*	*925*	*1,347*	*323*	*81%*
Percent of Peak			*62%*	*75%*	*90%*	*97%*	*100%*	*94%*	*81%*	*71%*	*69%*			
Total Study Area Utilization by Type of Parking														
	Public Lot: Areas 1-4	37	0	45	45	41	40	43	42	37	22	**45**	**-8**	**122%**
	Public Lot: Areas 5-14	*118*	*0*	*95*	*101*	*114*	*110*	*109*	*110*	*92*	*91*	114	4	97%
	Public Right-Of-Way	*514*	*0*	*137*	*240*	*351*	*439*	*462*	*421*	*311*	*207*	462	52	90%
	Total Public	*669*	*0*	*277*	*386*	*506*	*589*	*614*	*573*	*440*	*320*	614	55	92%
	Private	*1,028*	*0*	*570*	*633*	*712*	*730*	*744*	*696*	*664*	*644*	744	284	72%
Percent Utilization														
1	Safeway and Brockway Golf Course		84%	91%	90%	90%	84%	80%	76%	78%	84%			
2	North Tahoe Beach		122%	122%	111%	108%	116%	114%	100%	59%	68%			
3	267 to Secline North of 28		59%	81%	69%	81%	88%	72%	66%	56%	56%			
4	267 to Secline South of 28		57%	95%	138%	110%	105%	100%	105%	57%	38%			
5	Secline to Deer North of 28		35%	36%	50%	55%	58%	60%	45%	36%	32%			
6	Secline to Deer South of 28		63%	59%	69%	74%	73%	83%	82%	80%	75%			
7	Deer to Bear North of 28		23%	37%	49%	69%	82%	62%	54%	44%	39%			
8	Deer to Bear South of 28		86%	89%	95%	92%	92%	95%	81%	85%	81%			
9	Bear to Coon North of 28		37%	51%	63%	68%	67%	58%	50%	44%	35%			
10	Bear to Coon South of 28		31%	72%	119%	119%	125%	122%	78%	63%	59%			
11	Coon to Fox North of 28		21%	49%	67%	69%	75%	60%	44%	26%	25%			
12	Coon to Fox South of 28		59%	98%	110%	109%	118%	97%	96%	70%	27%			
13	Fox to Chipmunk North of 28		24%	28%	53%	70%	74%	65%	56%	58%	102%			
14	Fox to Chipmunk South of 28		34%	27%	54%	77%	86%	91%	70%	55%	44%			
TOTAL STUDY AREA			50%	60%	72%	78%	81%	75%	66%	57%	55%			
Percent Total Study Area Utilization by Type of Parking														
	Public Lot: Areas 1-4		122%	122%	111%	108%	116%	114%	100%	59%	68%			
	Public Lot: Areas 5-14		81%	86%	97%	93%	92%	93%	78%	77%	73%			
	Public Right-Of-Way		27%	47%	68%	85%	90%	82%	61%	40%	35%			
	Total Public		41%	58%	76%	88%	92%	86%	66%	48%	43%			
	Private		55%	62%	69%	71%	72%	68%	65%	63%	62%			

Bold indicated that parking utilization exceeds parking supply

Note 1: Excluding spaces used for construction.

Kings Beach Parking Counts Results.xlsx

- As also reflected in Figure 3, overall parking demand is relatively high between the 12 Noon hour and the 3 PM hour.

- Some individual parking districts had peak parking demand occurring at differing times. In particular, Districts 1, 2 and 4 (in the western portion of the study area) had peak parking demand around the Noon hour. Area 13 (Fox to Chipmunk north of 28) has a peak demand in the 6 PM hour, probably associated with restaurant use.

- While the study area as a whole always had available parking spaces, some individual districts had more parked cars than the legal parking capacity (indicating parking in unmarked areas, or more parked cars along curb lanes than calculated based upon the Code length of 25 feet per space). Areas where parking supply was exceeded at peak times consisted of the following:

    - The North Tahoe Beach area, where up to 45 parked vehicles were observed in the 37 marked spaces.

    - The area south of SR 28 between SR 267 and Secline Street, where up to 29 vehicles were parked, compared with 21 legal spaces.

    - The area south of SR 28 between Bear Street and Coon Street, with a utilization rate of up to 125 percent, as well as the area south of SR 28 between Coon Street and Fox Street with up to a 118 percent utilization rate. This reflects the popularity of beach parking.

Table 3 also presents the utilization by type of parking (public lot, public right-of-way, and private lot). As shown, the only public lot in areas 1-4 (west of Secline Avenue) was filled over capacity between 10 AM and 4 PM. The public lots east of Secline Avenue were 97 percent utilized at 12 Noon, and remained at over 90 percent utilization until 4 PM. Parking in the public right of way reached 90 percent of available spaces, by 2 PM. Utilization of all public spaces reached a high of 92 percent, in the 2 PM hour. Total parking in private spaces only reached a maximum of 72 percent, also at 2 PM. In sum, this data indicates that there are always parking spaces available somewhere in Kings Beach, but that finding an available space may require a walk of a block or two as well as crossing SR 28. The high level of utilization of public spaces also indicates use of private spaces by drivers (particularly beachgoers) not visiting the private business.

To gain an understanding of the variability of summer parking demand, counts were also conducted at the peak overall time (2 PM hour) for every day of the week. These results are presented in Table 4 and Figure 4, and detailed in Appendix A. As shown, Saturday was the busiest overall day for parking in Kings Beach, followed by Friday with 14 percent less parking, while the remainder of the week saw at least 20 percent less parking than on Saturday. This reflects the relatively high popularity of beach activity on Saturdays, though it is worth noting that the most convenient beach parking (such as North Tahoe Beach, and the area south of SR 28 between Deer and Bear) saw strong parking demand throughout the week. Some of the areas north of SR 28 saw higher parking demand during the typical work week than on Saturday. Public lots were relatively busy throughout the week, particularly the North Tahoe Beach lot.

Figure 3: Kings Beach Parking Count -- Saturday July 19, 2014

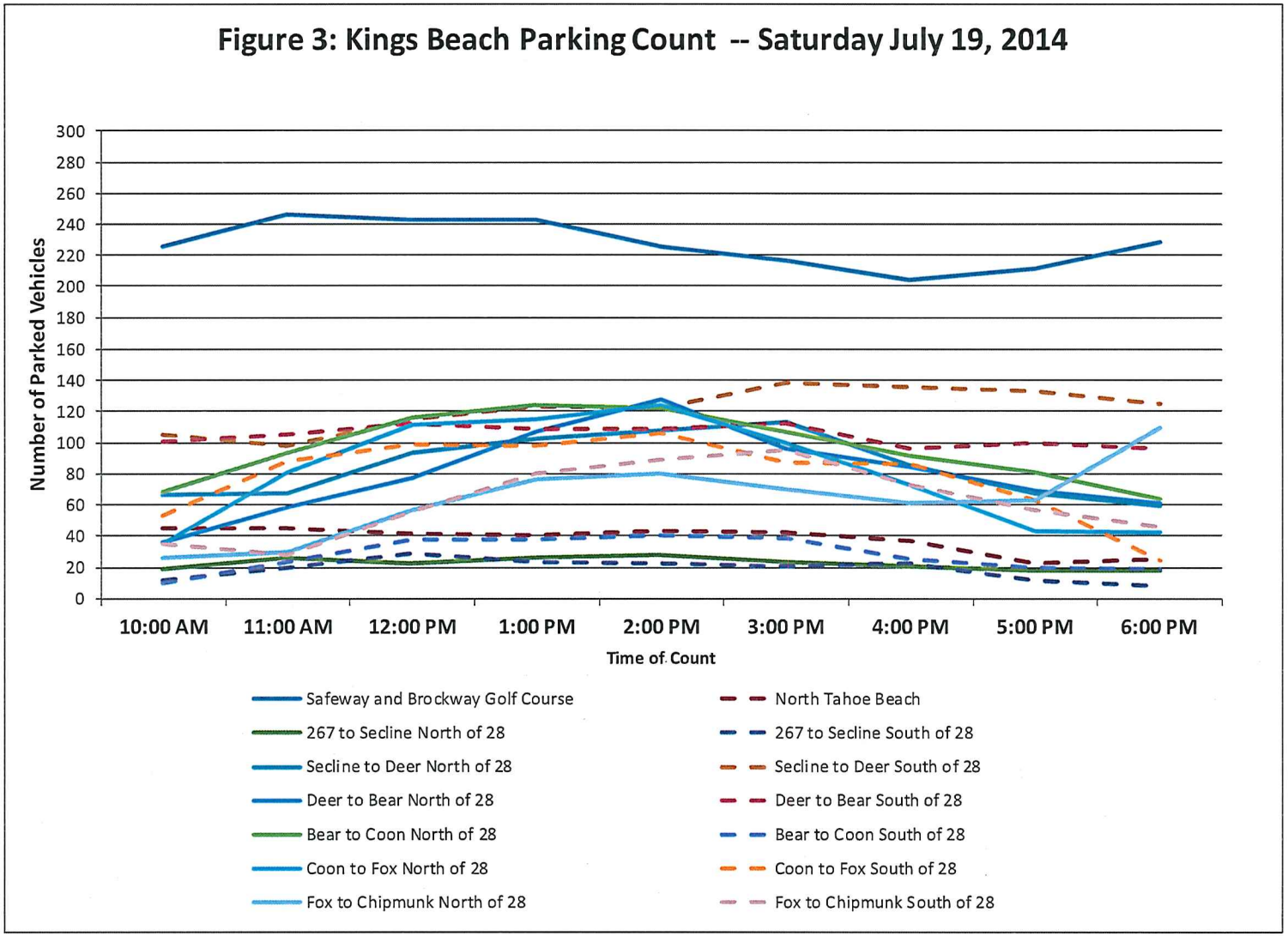

TABLE 4: Kings Beach Estimated Parking Utilization by Parking District and Day of Week

(Excluding Residential Properties)

District	Description	Total Available Parking Spaces	Number of Spaces Occupied in 2 PM Hour							Maximum Spaces Occupied	Supply Minus Demand	Maximum Percent Utilization
			Sun	Mon	Tue	Wed	Thur	Fri	Sat			
1	Safeway and Brockway Golf Course	270	159	149	186	166	141	180	226	226	44	84%
2	North Tahoe Beach	37	40	35	35	37	39	36	43	43	-6	116%
3	267 to Secline North of 28	32	20	9	16	16	28	22	28	28	4	88%
4	267 to Secline South of 28	21	31	14	20	9	9	19	22	31	-10	148%
5	Secline to Deer North of 28	187	56	65	80	76	113	91	108	113	74	60%
6	Secline to Deer South of 28	166	104	90	106	89	88	106	122	122	44	73%
7	Deer to Bear North of 28	156	47	66	67	85	96	111	128	128	28	82%
8	Deer to Bear South of 28	118	51	102	96	101	111	112	109	112	6	95%
9	Bear to Coon North of 28	183	110	123	109	132	123	108	122	132	51	72%
10	Bear to Coon South of 28	32	40	8	12	7	33	40	40	40	-8	125%
11	Coon to Fox North of 28	166	58	103	94	116	94	104	124	124	42	75%
12	Coon to Fox South of 28	90	80	84	82	77	98	98	106	106	-16	118%
13	Fox to Chipmunk North of 28	108	60	32	29	37	41	65	80	80	28	74%
14	Fox to Chipmunk South of 28	104	57	42	37	46	64	70	89	89	15	86%
TOTAL STUDY AREA		1,670	913	922	969	994	1,078	1,162	1,347	1,347	323	81%
Percent of Peak Day			68%	68%	72%	74%	80%	86%	100%			
Percent Utilization												
1	Safeway and Brockway Golf Course		59%	55%	69%	61%	52%	67%	84%			
2	North Tahoe Beach		108%	95%	95%	100%	105%	97%	116%			
3	267 to Secline North of 28		63%	28%	50%	50%	88%	69%	88%			
4	267 to Secline South of 28		148%	67%	95%	43%	43%	90%	105%			
5	Secline to Deer North of 28		30%	35%	43%	41%	60%	49%	58%			
6	Secline to Deer South of 28		63%	54%	64%	54%	53%	64%	73%			
7	Deer to Bear North of 28		30%	42%	43%	54%	62%	71%	82%			
8	Deer to Bear South of 28		43%	86%	81%	86%	94%	95%	92%			
9	Bear to Coon North of 28		60%	67%	60%	72%	67%	59%	67%			
10	Bear to Coon South of 28		125%	25%	38%	22%	103%	125%	125%			
11	Coon to Fox North of 28		35%	62%	57%	70%	57%	63%	75%			
12	Coon to Fox South of 28		89%	93%	91%	86%	109%	109%	118%			
13	Fox to Chipmunk North of 28		56%	30%	27%	34%	38%	60%	74%			
14	Fox to Chipmunk South of 28		55%	40%	36%	44%	62%	67%	86%			
TOTAL STUDY AREA			55%	55%	58%	60%	65%	70%	81%			
Percent Total Study Area Utilization by Type of Parking												
	Public Lot: Areas 1-4		108%	95%	95%	100%	105%	97%	116%			
	Public Lot: Areas 5-14		40%	80%	75%	74%	90%	92%	92%			
	Public Right-Of-Way		53%	44%	46%	49%	62%	68%	90%			
	Total Public		54%	53%	54%	56%	70%	74%	92%			
	Private		54%	56%	60%	61%	60%	65%	72%			

Source: LSC counts conducted July 19 - July 25, 2014.

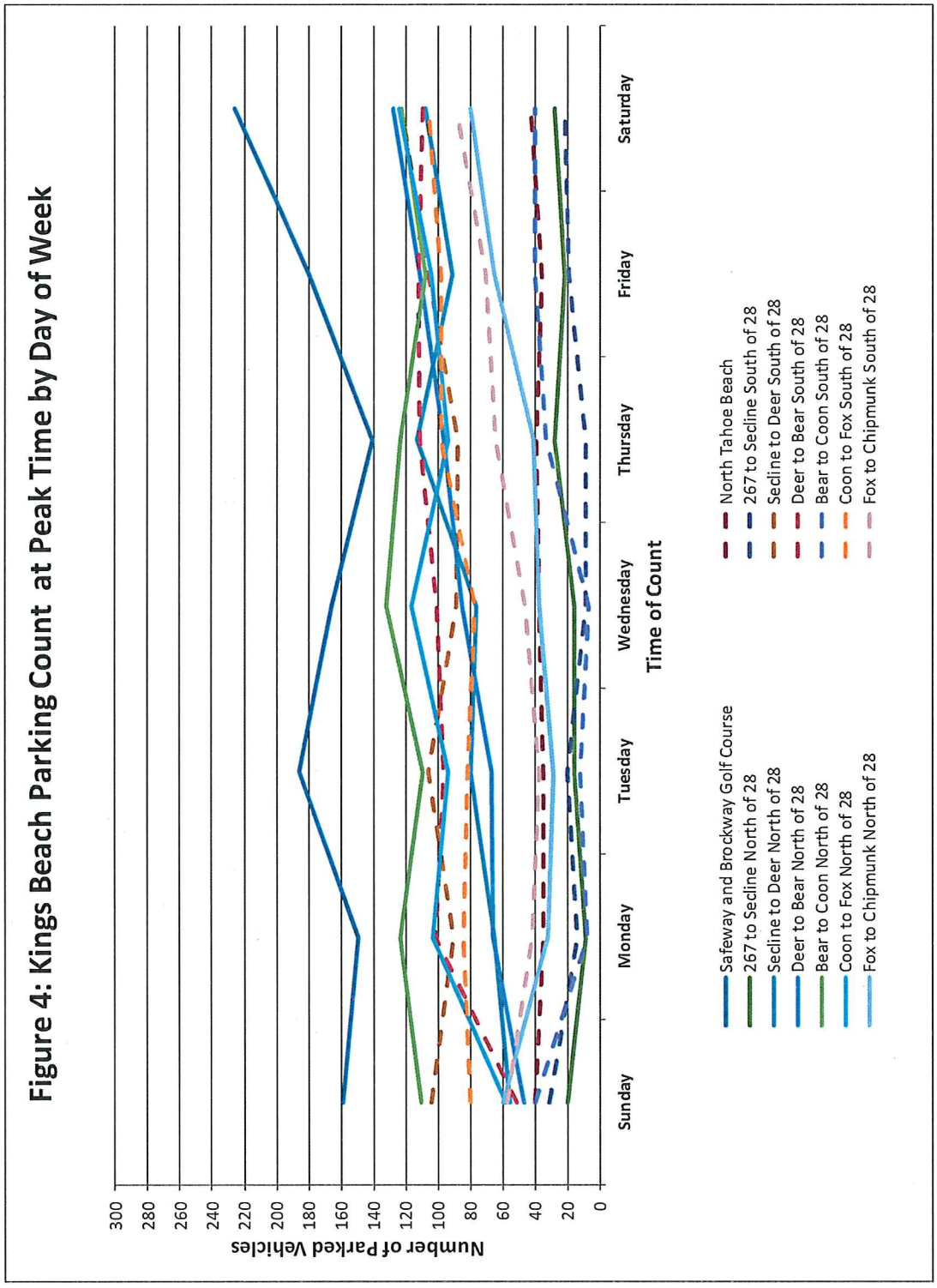
Figure 4: Kings Beach Parking Count at Peak Time by Day of Week
Number of Parked Vehicles
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Time of Count
Safeway and Brockway Golf Course
267 to Secline North of 28
Secline to Deer North of 28
Deer to Bear North of 28
Bear to Coon North of 28
Coon to Fox North of 28
Fox to Chipmunk North of 28
North Tahoe Beach
267 to Secline South of 28
Secline to Deer South of 28
Deer to Bear South of 28
Bear to Coon South of 28
Coon to Fox South of 28
Fox to Chipmunk South of 28

Tahoe City

Identical counts were also conducted in the Tahoe City core area. Hourly counts were conducted on Saturday, July 12, 2014, while counts were conducted in the 2 PM hour each day between July 12 and July 18. As shown in Table 5 and Figure 5, on the Saturday overall parking utilization peaked in the 2 PM hour, with a maximum of 1,793 parked vehicles. At an overall rate of 69 percent, utilization rates were lower than observed in Kings Beach. By district, the only area where parking was observed to exceed supply was the area south of the Truckee River (including the 64 Acres and SRA Outlet Parcel), where demand exceeded supply by up to 5 percent. Among other areas, only the Wye area (between SR 89/SR 28 and the river) exceeded 80 percent utilization.

The review of parking utilization by type of parking supply, as shown in the bottom portion of Table 4, indicates that the public lots in the Wye and 64 Acres districts (Districts 1-4) have high utilization in the afternoon and reach 103 percent utilization in the 3 PM hour. The public parking lots to the east (Districts 5-9, including the lower school lot) also have high utilization across much of the day, with the greatest utilization of 98 percent in the Noon hour. Public right-of-way parking utilization is relatively low (particularly compared with Kings Beach) at a maximum of 63 percent. The maximum overall utilization of private lots is also 63 percent. Overall, this data indicates a shortage of available parking in public lots throughout the Tahoe City area.

The utilization by day of week peaked on Saturday, as shown in Table 6 and Figure 6. However, both Friday and Sunday counts were only 4 percent lower than on Saturday and parking on the remainder of the days was at least 83 percent of the Saturday parking count. This indicates a substantially more consistent parking demand pattern by day of week than occurs in Kings Beach. The Commons Beach and midtown (west of Grove Street) parking use was higher on Sunday, the TCPUD and northern Wye area had the greatest parking use on Monday, while the Tahoe City Marina area had the highest use on Friday. The shortage in public lots is confined to the weekends, with maximum utilization on other days of the week not exceeding 68 percent.

Parking Duration and Turnover

An important factor in parking planning for a commercial center is the turnover of parking space – the number of times per day that a space is used by different drivers. A high turnover indicates use by customers (rather than employees) and helps to encourage retail spending. To gain insight into this factor, license plates were observed for the key segment of SR 28 between Grove Street and Mackinaw Street in Tahoe City. Each half hour between 8 AM and 4 PM on Sunday August 30, 2014 (the Sunday of Labor Day Weekend), a LSC staffer walked along both sides of the street recording the last few characters of the license plates in each onstreet space. These license plate numbers were then compared to identify the number of half-hour observations each vehicle was parked in the area. (Because of the impacts of the highway construction project on on-highway parking, no turnover counts were conducted in Kings Beach.)

As summarized in Table 7, a total of 255 vehicles were observed to arrive and depart within the eight-hour survey period. An additional 75 vehicles were observed either in the first or last survey run (the large majority in the last survey run), and thus may have a longer stay than observed. Focusing on the vehicles with stays fully within the survey period, the large majority (85 percent) were observed to stay less than the signed 2 hour maximum stay (e.g., were

TABLE 5: Tahoe City Peak Summer Parking Utilization by Parking District

(Excluding Residential Properties) Saturday, July 12, 2014

District	Description	Total Parking Spaces	Number of Spaces Occupied 10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	Maximum Spaces Occupied	Supply Minus Demand	Percent Utilization
1	TCPUD	117	19	17	23	23	29	25	18	14	16	29	88	25%
2	64 Acres and S of Truckee River	362	116	163	248	346	376	380	344	261	198	380	-18	105%
3	South Wye Area	223	175	178	185	187	186	164	150	138	118	187	36	84%
4	North Wye Area	241	141	173	145	144	138	147	141	110	70	173	68	72%
5	Commons Beach Area - both sides of SR 28	300	134	157	172	172	158	148	163	127	135	172	128	57%
6	Mid Tahoe City to Grove Street	220	122	130	148	157	172	147	133	113	106	172	48	78%
7	North of SR 28, Grove Street Parking and East	454	233	251	269	279	294	322	287	261	254	322	132	71%
8	TC Marina Area	189	102	133	134	130	126	132	137	131	136	137	52	72%
9	Safeway and Boatworks Area	480	199	235	292	296	314	290	309	324	323	324	156	68%
TOTAL STUDY AREA		*2,586*	*1,241*	*1,437*	*1,616*	*1,734*	*1,793*	*1,755*	*1,682*	*1,479*	*1,356*	*1,793*	*793*	*69%*
	Percent of Peak		*69%*	*80%*	*90%*	*97%*	*100%*	*98%*	*94%*	*82%*	*76%*			
Total Study Area Utilization by Type of Parking														
	Public Lot - Districts 1-4	*335*	*108*	*128*	*203*	*295*	*329*	*345*	*308*	*226*	*163*	**345**	**-10**	**103%**
	Public Lot - Districts 5-9	*215*	*182*	*204*	*211*	*206*	*203*	*194*	*180*	*156*	*149*	211	4	98%
	Public Right-Of-Way - Districts 1-4	*56*	*36*	*28*	*29*	*33*	*32*	*30*	*29*	*30*	*31*	36	20	64%
	Public Right-Of-Way - Districts 5-9	*204*	*97*	*118*	*129*	*120*	*112*	*126*	*134*	*114*	*127*	134	70	66%
	Total Public	*810*	*423*	*478*	*572*	*654*	*676*	*695*	*651*	*526*	*470*	695	115	86%
	Private	*1,776*	*818*	*959*	*1,044*	*1,080*	*1,117*	*1,060*	*1,031*	*953*	*886*	1117	659	63%
Percent Utilization														
1	TCPUD		16%	15%	20%	20%	25%	21%	15%	12%	14%			
2	64 Acres and S of Truckee River		32%	45%	69%	96%	**104%**	**105%**	95%	72%	55%			
3	South Wye Area		78%	80%	83%	84%	83%	74%	67%	62%	53%			
4	North Wye Area		59%	72%	60%	60%	57%	61%	59%	46%	29%			
5	Commons Beach Area - both sides of SR 28		45%	52%	57%	57%	53%	49%	54%	42%	45%			
6	Mid Tahoe City to Grove Street		55%	59%	67%	71%	78%	67%	60%	51%	48%			
7	North of SR 28, Grove Street Parking and East		51%	55%	59%	61%	65%	71%	63%	57%	56%			
8	TC Marina Area		54%	70%	71%	69%	67%	70%	72%	69%	72%			
9	Safeway and Boatworks Area		41%	49%	61%	62%	65%	60%	64%	68%	67%			
TOTAL STUDY AREA			48%	56%	62%	67%	69%	68%	65%	57%	52%			
Percent Total Study Area Utilization by Type of Parking														
	Public Lot - Districts 1-4		32%	38%	61%	88%	98%	**103%**	92%	67%	49%			
	Public Lot - Districts 5-9		85%	95%	98%	96%	94%	90%	84%	73%	69%			
	Public Right-Of-Way - Districts 1-4		64%	50%	52%	59%	57%	54%	52%	54%	55%			
	Public Right-Of-Way - Districts 5-9		48%	58%	63%	59%	55%	62%	66%	56%	62%			
	Total Public		52%	59%	71%	81%	83%	86%	80%	65%	58%			
	Private		46%	54%	59%	61%	63%	60%	58%	54%	50%			

Bold indicated that parking utilization exceeds parking supply

Tahoe City Parking Count Results.xlsx

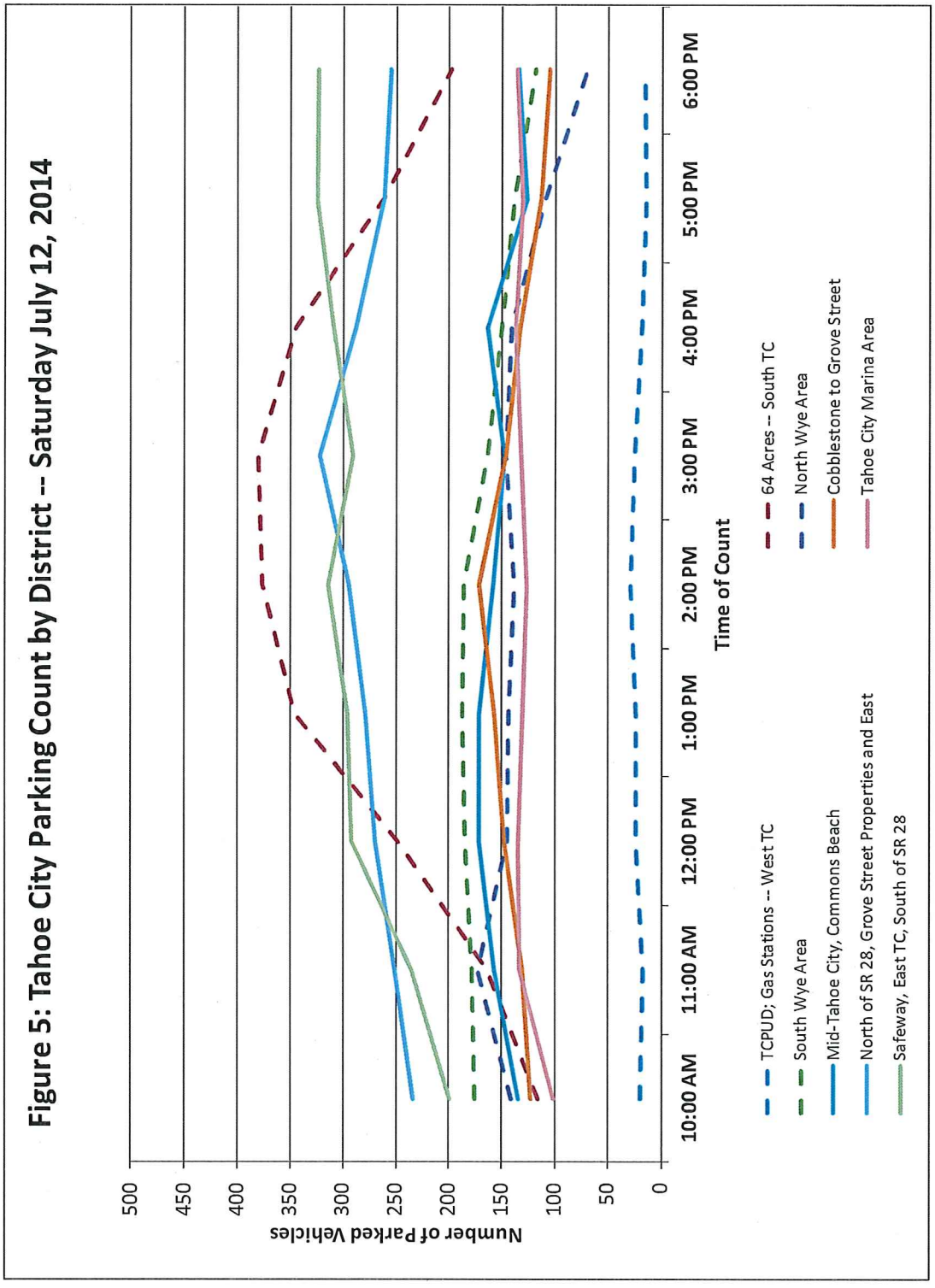
Figure 5: Tahoe City Parking Count by District -- Saturday July 12, 2014
Number of Parked Vehicles
500
450
400
350
300
250
200
150
100
50
0
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
Time of Count
TCPUD; Gas Stations -- West TC
South Wye Area
Mid-Tahoe City, Commons Beach
North of SR 28, Grove Street Properties and East
Safeway, East TC, South of SR 28
64 Acres -- South TC
North Wye Area
Cobblestone to Grove Street
Tahoe City Marina Area

TABLE 6: Tahoe City Estimated Parking Utilization by Parking District and Day of Week

(Excluding Residential Properties)

District	Description	Total Parking Spaces	Number of Spaces Occupied in 2 PM Hour							Maximum Spaces Occupied	Supply Minus Demand	Maximum Percent Utilization
			Sunday	Monday	Tuesday	Wed	Thurs	Friday	Saturday			
1	TCPUD	117	22	71	66	68	61	67	29	71	46	61%
2	64 Acres and S of Truckee River	362	322	228	214	188	154	262	376	376	-14	104%
3	South Wye Area	223	182	172	181	161	136	168	186	186	37	83%
4	North Wye Area	241	125	155	130	147	119	152	138	155	86	64%
5	Commons Beach Area - both sides of SR 28	300	218	165	167	157	163	174	158	218	82	73%
6	Mid Tahoe City to Grove Street	220	170	108	187	176	207	186	172	207	13	94%
7	North of SR 28, Grove Street Parking and East	454	252	236	247	232	215	254	294	294	160	65%
8	TC Marina Area	189	133	92	100	139	132	139	126	139	50	74%
9	Safeway and Boatworks Area	480	298	267	257	286	297	314	314	314	166	65%
TOTAL STUDY AREA		2,586	1,722	1,494	1,549	1,554	1,484	1,716	1,793	1,793	793	69%
Percent of Peak Day			96%	83%	86%	87%	83%	96%	100%			

Percent Utilization

1	TCPUD	19%	61%	56%	58%	52%	57%	25%
2	64 Acres and S of Truckee River	89%	63%	59%	52%	43%	72%	104%
3	South Wye Area	82%	77%	81%	72%	61%	75%	83%
4	North Wye Area	52%	64%	54%	61%	49%	63%	57%
5	Commons Beach Area - both sides of SR 28	73%	55%	56%	52%	54%	58%	53%
6	Mid Tahoe City to Grove Street	77%	49%	85%	80%	94%	85%	78%
7	North of SR 28, Grove Street Parking and East	56%	52%	54%	51%	47%	56%	65%
8	TC Marina Area	70%	49%	53%	74%	70%	74%	67%
9	Safeway and Boatworks Area	62%	56%	54%	60%	62%	65%	65%
TOTAL STUDY AREA		67%	58%	60%	60%	57%	66%	69%

Percent Total Study Area Utilization by Type of Parking

Public Lot - Districts 1-4	85%	58%	54%	48%	36%	66%	98%
Public Lot - Districts 5-9	84%	66%	59%	53%	56%	68%	94%
Public Right-Of-Way	78%	65%	73%	67%	68%	80%	55%
Total Public	83%	62%	61%	56%	51%	71%	83%
Private	59%	56%	59%	62%	60%	64%	63%

Source: LSC counts conducted July 12 - July 18, 2014.

Figure 6: Tahoe City Parking Count at Peak Time by Day of Week

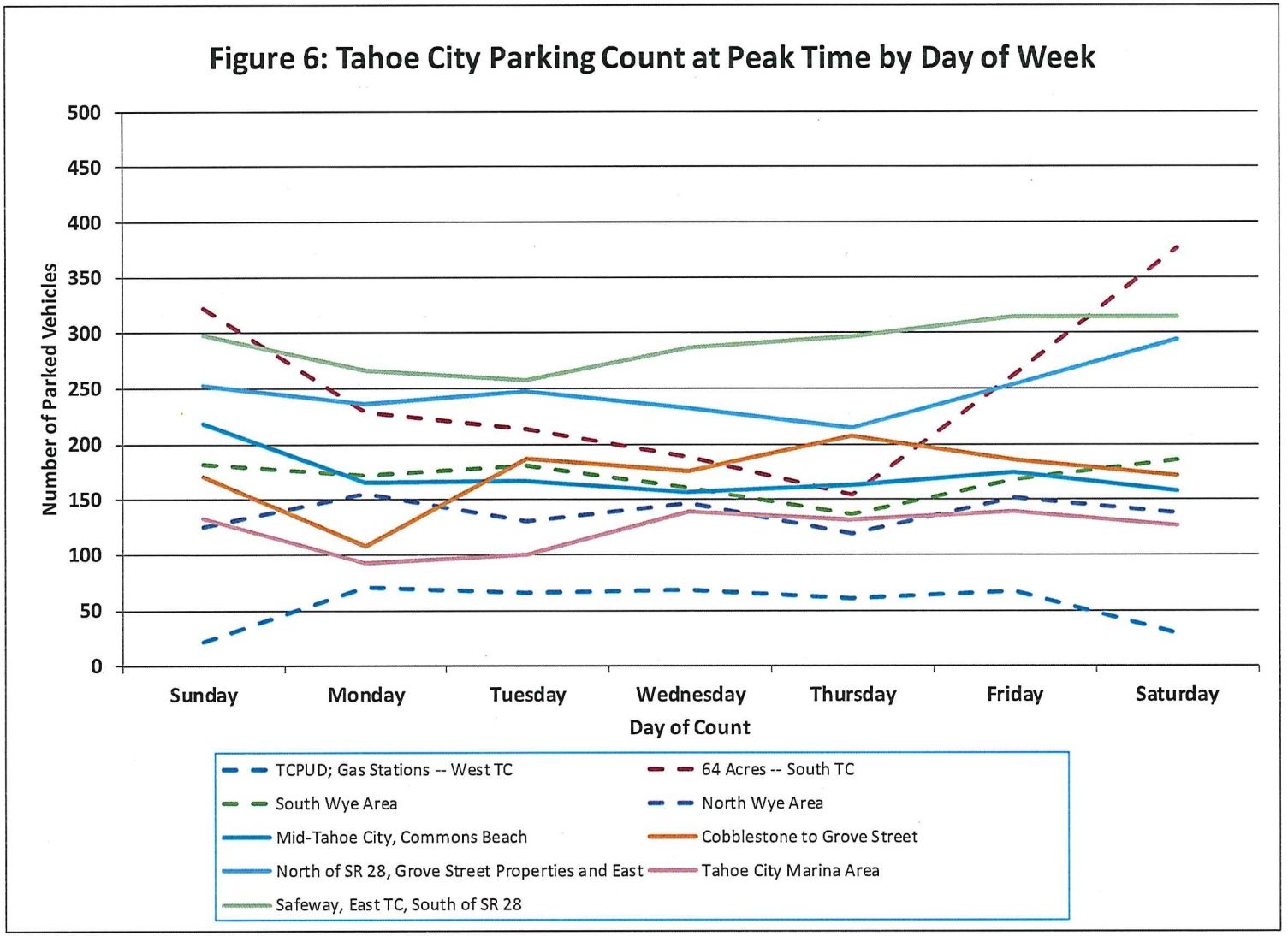

TABLE 7: Observed Parking Turnover in Tahoe City

SR 28 Between Grove Street and Mackinaw Street *Sunday August 31, 2014 Between 8 AM and 4 PM*

# of Observations	Average Length of Stay (Hours)	Total Stay Within Survey Period (Not Observed in First or Last Survey Period) North Side	South Side	Total		Observed in First or Last Survey Period North Side	South Side	Total	
1	0.25	60	25	85	33.3%	24	5	29	38.7%
2	0.75	41	23	64	25.1%	4	9	13	17.3%
3	1.25	24	21	45	17.6%	1	1	2	2.7%
4	1.75	17	6	23	9.0%	5	4	9	12.0%
5	2.25	11	7	18	7.1%	4	1	5	6.7%
6	2.75	5	1	6	2.4%	3	1	4	5.3%
7	3.25	2	3	5	2.0%	3	4	7	9.3%
8	3.75	2	1	3	1.2%	2	0	2	2.7%
9	4.25	3	1	4	1.6%	1	1	2	2.7%
10	4.75	0	0	0	0.0%	0	1	1	1.3%
11	5.25	0	1	1	0.4%	0	0	0	0.0%
12	5.75	0	0	0	0.0%	0	1	1	1.3%
13	6.25	0	0	0	0.0%	0	0	0	0.0%
14	6.75	1	0	1	0.4%	0	0	0	0.0%
15	7.25	0	0	0	0.0%	0	0	0	0.0%
16	7.75	0	0	0	0.0%	0	0	0	0.0%
Total		166	89	255	100%	47	28	75	29.4%

Average Length of Stay (Hours)	1.1	1.1	1.1
Percent Vehicles Exceeding 2 Hour Stay	14%	16%	15%
Percent Vehicles Exceeding 4 Hour Stay	2%	2%	2%
Percent of Space Use by Vehicles Exceeding 2 Hour Stay	41%	41%	41%
Percent of Space Availability Used by Vehicles Exceeding 4 Hour Stay	11%	9%	10%

observed in one to four half-hour periods) and only 2 percent of vehicles were observed to stay more than 4 hours. No vehicles were observed to stay the full eight hours (all either were observed to arrive or to depart), and only 2 individual vehicles were observed to stay more than 5 hours. The average estimated length of stay was 1.1 hours. (A review of the additional vehicles observed in the first or last survey period shows a similar pattern, indicating that a longer survey period would not substantially change the results.)

An individual vehicle parked for a longer period "uses up" more parking capacity than does a vehicle parked for a shorter period. The number of vehicles were weighted by their length of stay to identify the proportion of total space use (as measured in vehicle-hours of parking) used by vehicles parked for longer period. This indicates that 41 percent of the total parking activity is generated by vehicles parked for greater than 2 hours, and 10 percent by vehicles parked for greater than 4 hours.

Overall, this survey indicates that the proportion of total drivers parking in the area for longer-term purposes (such as employees) is quite small. However, as the longer-term parkers use up a greater capacity, additional parking for true short-term parkers (such as drivers stopping for lunch or to shop at only one or two stores) could be generated through stricter enforcement of the two-hour limit. This would, however, run the risk of impacting beachgoers, customers that are window shopping, and others making a day trip out of their visit to Tahoe City.

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Chapter 4
Review of Peer Resort Parking and Other Parking Rate Data

This chapter presents a review of parking regulations and strategies of other peer resort areas, consisting of Truckee and Mammoth Lakes, California; Aspen and Breckenridge, Colorado; Park City, Utah; and Lake Placid, New York. In addition, pertinent data from other sources is presented, specifically the *Parking Generation Manual* prepared by the Institute of Transportation Engineers and the Urban Land Institute's *Shared Parking*.

Peer Resort Parking Information

This section first presents a review of the parking strategies implemented in the commercial core areas of the peer communities, including financial strategies. A comparison of code parking rates is next presented. Specific elements of the parking regulations (off-site parking, parking design standards, etc.) are then discussed.

Overview of Existing Public Parking Strategies

A review of parking programs in similar mountain resort communities was conducted as a means to help establish a standard for a parking program in North Tahoe. Information was collected from two resort communities outside of California – Park City, Utah and Aspen, Colorado – and from nearby Truckee and Mammoth Lakes in California.

Peer Parking Programming

Table 8 provides a summary of the existing parking programs, including existing parking supply, paid parking regulations, timed parking regulations and residential programs. The following bullets summarize each of these components for the peer communities:

- Existing Parking Supply: On-street parking ranges from 200 spaces in Park City to 820 in Aspen. Both Park City and Aspen have large amounts of off-street parking; in Aspen, this includes a parking garage and 1,500 space Brush Creek Intercept Lot outside of town, while in Park City this total is comprised of surface lots and parking garages. Truckee is on the low end, with only 141 off-street spaces. Aspen has an intercept lot 5.5 miles from town that is shared with Snowmass Village, while Park City has an intercept lot 4 miles out of town that was constructed as mitigation for a major hotel (Montage) and is used for the hotel employee parking, as well as for major special events (such as Sundance Film Festival).

- Paid Parking: Park City, Aspen and Truckee have paid parking programs for the on- and off-street parking areas. Rates vary by community – both Truckee and Park City have similar standard hourly parking rates, while Aspen has a progressive system that costs more for each hour that you are parked, with a maximum of four hours. All locations utilize the pay and display type facilities, and both Aspen and Park City also use pay by phone options. Additionally, Aspen has meter facilities for some on-street parking. Paid parking in Mammoth Lakes is limited to the 155-space lot adjacent to the Village at Mammoth, which is free for the first hour and paid after that. The other public lot in the downtown area is free. Paid parking programs in all areas are enforced year-round.

TABLE 8: Peer Parking Programming

	Public Parking Supply		Paid Parking Program				Timed Parking Limits				
	On-Street	Off-Street	Rates	Facilities Included	Seasons Enforced	Type of Payment	Limits	Hours Enforced	Seasons Enforced	Residential Parking Program?	Parking Permits for Use of Public Parking in Activity Center?
City of Aspen	820	1,840	$2 for first hour; $3 for second hour; $4 for third hour; $5 for fourth hour	On-street and parking lots/garages	Year-round; Sundays and holidays are free; Saturdays free in off-season	Meters, Pay&Display, Pay by Phone, Staffed Booths, Retail Locations	Core = 4 hrs Residential = 2 hours Max=72 hrs without moving on-street	All	All	Permits for residents of downtown core	P
Park City	200	1,100 (Note 1)	$1.50 per hour w/ 3 hour limit	Main Street and 50-space parking lot	Year-round	Pay&Display, Pay by Phone	Ranges from 2 to 6 hours	11am - 8pm	Year-round	Permits for residents and guests on streets parallel to Main Street	P Employees and residential permits
Town of Truckee	296	141	$1 - $1.50 per hour	On-street and Parking lots	Year-round	Pay&Display	Unlimited as long as fees are paid; 2 hours in free lot without employee parking pass	10am - 6pm	Year-round	Only as part of development agreement	P Employees and residential permits
Town of Mammoth Lakes	Not Available	85 in downtown area, 155 in Village	Free first hour, then $1 per hour	155 space Village Lot Only	Year-round	Pay & Display, Visa Only	None	--	--	No	No

Source: City of Aspen Parking Department, 2014; Town of Truckee Police Department, 2014; Park City Municipal Corporation, Public Works Department, 2014

Note 1:750-space parking lot 3 miles from downtown is also available, used for employee parking of one major hotel and for event parking.

- Timed Parking Limits: Parking limits vary by community, with Truckee having no maximum parking limit in the downtown area as long as fees are paid. Truckee's free parking lot has a 2 hour time limit unless an employee permit is displayed. In Aspen, cars may be parked at meters in the core for 4 hours and in the residential areas (without a permit) for 2 hours. In Park City, limits vary by location but range from 2 hours to a 6 hour maximum.

- Residential Parking Programs: Aspen and Park City have substantial residential parking permit programs in neighborhoods directly adjacent to the downtown or core areas. When public parking in the downtown is at capacity, vehicles can overflow park in residential neighborhoods. To alleviate this, both Aspen and Park City have implemented residential parking programs. The City of Aspen provides two street permits to each resident free of charge, in addition to guest passes, with the option to purchase additional permits for up to 5 cars at a nominal fee. Park City provides permits for residents on the streets that run parallel to Main Street, as well as guest and lodging permits in the same locations. No parking is allowed on these streets without a permit. The Town of Truckee has a limited residential parking permit as part of specific development agreements – only one permit is issued and is specifically designed and signed for the purpose.

- Parking Permits for Public Parking in Activity Centers: The Town of Truckee issues two different types of parking permits for employees in designated downtown areas. One is paid for and the vehicle can park without having to pay for daily parking, and the second allows a vehicle to pay $2.00 per day to park in designated areas or to park in the two-hour parking lot all day for free. Similarly, Park City offers permits to extend the 4 or 6 hour time limit for employees in the CBD for $100 per year. The City of Aspen allows for parking related to special events and construction in the downtown area for a fee.

Peer Parking Program Costs and Finances

As shown in Table 9, financing and costs vary for each community. (Financial information for Mammoth Lakes was not available, as the only pay lot is operated by a private management firm.) The summary below highlights financial components of the parking programs.

- Public Parking Program Financing: The City of Aspen's program is financed through an in-lieu payment program and an enterprise fund. The enterprise fund generates money and pays for all the parking program's expenses, and any excess funding goes to pay for other transportation programs transit, Car2Go, and other TDM programs. Park City also finances their program strictly through an enterprise fund. The Town of Truckee differs in that the entire program is paid for through parking revenues.

- Public Parking Program Enforcement Costs: The annual management costs for the City of Aspen and Park City are very similar, costing roughly $650,000 and $609,000 per year, respectfully. The Town of Truckee was on the lower end, which is to be expected with a smaller program, with just over $406,000 estimated in the current fiscal year's budget. Facility maintenance costs, including parking garages and lots, are roughly $130,000 per year in Aspen and $82,000 in Truckee. Park City's maintenance costs are covered under a different program and department, and are not available specifically for the public parking areas.

- Total Staff: Staffing for parking-related operations is consistent throughout the year in all communities. Aspen has the most staff dedicated to parking, with 6.5 FTE in

administrative/management roles and another 6 FTE in parking officer positions. Park City has a total of 8 staff members for their parking program, while Truckee only has 1.55 FTE.

- Annual Revenues: The Town of Truckee and Park City have moderate annual revenues, with Truckee's program generating roughly $578,000 annually and Park City generating $700,000. Aspen estimates that their revenues from parking are upwards of $4.1 million each year, which is not surprising considering the extent of their parking program.

TABLE 9: Peer Parking Program Costs and Financing

	Parking Program Financing			Parking Program Enforcement Costs			
	In-Lieu Payment Program	General Fund	Other	Annual Management Costs	Annual Facility Maintenance Costs	Total Staff in Peak Season	Annual Revenues
City of Aspen			Enterprise Fund	$650,000	$130,000	6.5 FTE admin/mgmt; 6 FTE parking officers	$4.1 million
Park City			Enterprise Fund	$609,000	Under different department/ program	8	$700,000
Town of Truckee	Yes		Parking District operates solely off revenue	$406,650	$82,094	1.55 FTE	$578,000

Source: City of Aspen Parking Department, 2014; Town of Truckee Police Department, 2014; Park City Municipal Corporation, Public Works Department, 2014. Data not available for Mammoth Lakes.

In-Lieu Fee Programs

As discussed above, an in-lieu fee program allows a developer to meet some or all of their parking requirements through payment of fees to a program to provide public parking, rather than providing parking on-site. The review of peer communities indicates that:

- **Truckee** has an in-lieu parking fee in the Downtown districts. The current fee is around $5,600 per space, but Town Staff indicates that it is far below the actual cost of providing parking, which has been a problem in actually implementing parking improvements. To date, ten individual development projects have paid in-lieu fees, the most recent of which is the Cake Tahoe retail store. These funds have been banked (although there are currently plans to use them as part of the downtown paid parking program). The Town generally will not

allow a project to use the in-lieu fee for more than 50 percent of their required onsite parking.

- **Mammoth Lake**'s Code allows for the adoption of an in-lieu fee program. However, this program has never been actually established.

- **Breckenridge** has established an in-lieu fee in a specified service area. The fee is set at $19,236 per space (2013 dollars, increasing by CPI).

- **Aspen** has an in-lieu fee program (throughout the city) at a fee of $30,000 per space, available to commercial and multifamily residential uses only. The rate was established in 2005; while the Code allows for the period review of the rate, this has not subsequently occurred.

Parking Demand Rates

The key element of local parking regulations are the parking demand rates – the number of parking spaces required per unit of development, for various development types. Parking codes vary in complexity, from relatively simple versions with a short list of uses (such as Lake Placid's 13 uses), to North Tahoe's relatively complex list of 90 various uses. Table 10 presents a comparison of current parking rates. Note that both Aspen and Breckenridge require generally less parking in their downtown areas than in outlying areas. A review of this table indicates the following regarding how the current North Tahoe requirements compare with the peers:

- **Multifamily Residential** – The current North Tahoe rate is comparable with the peers (outside of the downtown areas) for 1 or 2 bedroom units, but is relatively high compared with many of the peers require less parking for larger units. North Tahoe's is also the only code that incorporates the number of individual beds into the calculation.

- **Hotel/Motel** – North Tahoe's relatively complicated code requirement (which reflects forecasts of various types of employees), at typical rates of employees per unit, results in higher parking requirements than any of the peers.

- **General Retail/Commercial and Grocery Store** – The current North Tahoe rates are generally consistent with the peer rates, with the exception that the Aspen and Breckenridge downtown rates are substantially lower.

- **Restaurants** – The current North Tahoe rates are near the median of the peer requirements (assuming typical numbers of seats per thousand square feet), for both quality restaurants and fast-food restaurants. Only Truckee reflects outdoor dining space in their parking calculations.

- **General Office** – All of the peer rates are lower than the current North Tahoe rate (particularly in the downtown areas), except that Mammoth Lake's rate is equal to the North Tahoe rate. Park City does have a higher rate for "intensive office" (such as a call center).

- **Light Industrial** – The current North Tahoe rate is close to the average of the non-downtown-area peer rates. Only the North Tahoe Code considers storage and non-storage areas at differing rates.

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TABLE 10: Summary of Peer Community Parking Rates

Major Land Use Category	North Lake Tahoe		Truckee		Mammoth Lakes		Aspen				Lake Placid		Breckenridge				Park City		North Tahoe Rate Compared With Peers
							Downtown Area		Elsewhere				Urban Service Area		Elsewhere				
	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	Rate	Unit	
Multifamily Residential	0.5	Bed AND	1.875	Studio, 1 BR Unit	1	Studio, 1 BR Unit	1	Unit	2	Unit OR	1.5	Unit	1.1	Unit	1	Studio Unit	1	Unit (< 650 SF)	For 1 or 2 BR units, North Tahoe consistent with peer rates outside of downtown areas. 2BR rate higher than in peer downtown areas. For larger units, higher rate than peers.
	0.5	Bedroom	2.5	2 BR + Unit	2	2 BR, 3 BR Unit			1	Bedroom (1)							1.5	Unit (650 to 1,000 SF)	
					3	4 BR + Unit									1.5	Unit (3)	2	Unit (1,000 to 2,500 SF)	
																	3	Unit (> 2,500 SF)	
Hotel / Motel	1	Unit AND	1	Room AND	1.05	Unit (6)	0.5	Unit	0.7	Unit	1	Unit	1.1	Unit	1	Guest Room	1	Room or Suite	Assuming 0.6 peak onsite employees per room, North Tahoe higher than all peers.
	4	KSF Meeting/ Display Area AND	0.5	Employees at Peak															
	2.5	Commercial/ Retail Area AND																	
	0.33	Part-Time Employee at Peak AND																	
	0.5	Full-Time Employee at Peak AND																	
	1	Full-Time Admin Employee at Peak																	
General Commercial	3.33	KSF GSA	4	KSF Sales AND	4	KSF GFA	1	KSF	3	KSF	3.33	KSF	1.4	KSF GFA	2.5	KSF GFA	3	KSF Net Leasable	North Tahoe generally consistent with non-downtown rates.
			1.67	KSF Storage Area															
Shopping Center	3.33	KSF GSA	4	KSF (< 30 KSF) OR	n/a		n/a		n/a		5.50	KSF	n/a		n/a		3.5	KSF Leasable	North Tahoe comparable or lower than available peers.
			3.33	KSF (30+ KSF)															
Grocery Store	3.33	KSF GSA	4	KSF GFA AND	6.67	KSF GFA	1	KSF	3	KSF	3.33	KSF	2.5	KSF GFA	n/a		5	KSF Net Leasable	North Tahoe near median of peer rates.
			1.67	KSF Storage Area															
Restaurant – Quality	10	KSF GFA OR	13.33	KSF for Patrons AND	0.33	Seat	1	KSF	3	KSF	0.33	Seat (2)	3.5	KSF GFA	0.25	persons capacity	10	KSF Net Leasable	At typical 31 seats/KSF, North Tahoe consistent with most peers.
	0.25	Customer or Seat (1)	10.00	KSF for Patrons in Outdoor Dining AND															
			3.33	KSF Service Area															
Restaurant – Fast Food	10	KSF GFA OR	10	KSF GFA AND	11.76	KSF GFA	1	KSF	3	KSF	0.33	Seat (2)	3.5	KSF GFA	0.25	persons capacity	15	KSF Net Leasable	At typical 17 seats/KSF, North Tahoe near median of peer rates.
	0.25	Customer or Seat (1)	1	KSF Outdoor Dining Area															
General Office	4	KSF GSA	4	KSF (up to 5K) or	4	KSF GFA	1	KSF	3	KSF	3.33	KSF	1.4	KSF GFA	2.5	KSF GFA	3	KSF (7)	North Tahoe higher than 5 peers and equal to 1 (Mammoth Lakes)
			3.33	KSF (5+ KSF)															
Light Industrial	2	KSF Non-Storage Area AND	2	KSF (up to 25KSF) or	1.67	KSF GFA	1	KSF	3	KSF	NA		n/a		2.5	KSF GFA (5)	2.5	KSF AND	North Tahoe near median of peer rates.
	1	KSF Storage Area	1	KSF (25+ KSF)													0.5	Peak employees (8)	
School - Elementary	1	Employee AND	2	Classroom AND	n/a		Detailed Study Required						n/a		2	classroom	0.2	Seat OR	Difficult to compare due to uncertain definition of non-classroom area
	20	KSF Non-Classroom Area	5	KSF Auditorium Area													0.67	Employee OR	
																	1	KSF (1)	
School - High School	1	Employee AND	3	Classroom AND	n/a		Detailed Study Required						n/a		0.25	student and faculty (4)	1	Seat OR	North Tahoe significantly higher than any peer
	0.33	Student AND	0.17	Student													0.67	Employee OR	
	0.25	Seat in Auditorium etc. AND															1	KSF (1)	
	10	KSF Non-Classroom Meeting Area																	
Public Assembly / Auditorium	1	Full-Time Employee AND	0.33	Seat OR	20	KSF GFA	Detailed Study Required				5	KSF OR	0.3	seat	0.25	seat	0.2	Seat	At typical seats per KSF, North Tahoe rate is significantly higher than any peer
	6.67	KSF GFA AND	20	KSF GFA (without fixed seats)							0.2	Seat (1)							
	0.33	Seat																	

(1) Higher of the two
(2) Or 20 per KSF available to customers where no seating is available
(3) 1 full bedroom or greater.
(4) High school or college
(5) Plus loading bays
(6) Plus 2 spaces for manager unit. Lockoffs count as separate unit.
(7) 5 per KSF for "Intensive Office"
(8) Plus company vehicles

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- **Elementary School** – There is some ambiguity in the current North Tahoe Code regarding the requirement of 20 spaces per KSF of "non-classroom area". If strictly applied to offices, restrooms, hallways, auditorium, etc., the resulting overall rate far exceeds the peer rates. The only peer that makes a distinction is Truckee, with requires 5 spaces per KSF of auditorium area only (along with a rate per classroom).

- **High School** – The current North Tahoe rate is a complicated formula based on employees, students, auditorium seats and meeting areas. For the relative quantities typically found in a high school, it results in parking requirement significantly higher than the peers.

- **Public Assembly** – The rate currently in the North Tahoe Code is significantly higher (roughly twice) that of the peer communities, at typical numbers of seats per thousand square feet of floor area.

Each peer community was asked to provide input on their satisfaction with parking code and to discuss any issues that they have come across within their program. Related to existing parking codes, Aspen's Parking Department believes that their codes are too low, while Truckee and Park City are very satisfied with their current code.

Land uses can present issues with respect to parking requirements. In particular, in Aspen, non-profit development projects do not need to include new parking spaces, regardless of whether they are located in the downtown core. These developments are still generating a need for parking and additional traffic, and according to the Parking Department, should be held the same development standards as all other projects in the City. In Park City, the parking program is struggling with multi-occupancy residences, especially seasonal skier type units, where occupancy can vary greatly.

Overall, the current North Tahoe rates are consistent with the peers regarding retail, restaurant, light industrial and general office uses and for smaller multifamily units, but are higher than the peers for the lodging, school and public assembly uses, as well as for larger multifamily units.

Other nuances of the peer community parking requirements are as follows:

- In Lake Placid's "Village Center District", lots of 0.3 acres or less are exempt from the off-street parking requirements. (This is larger than the majority of commercial lots in the Kings Beach commercial core.)

- Truckee has established their parking rates as both maximum and minimum. Any proposed off-street spaces in excess of the standards may be approved "only in conjunction with a land use parking, and when additional landscaping and pedestrian improvements are also provided." The Town cannot approve a project that proposes parking more than 20 percent over the standard rate.

- In North Tahoe, a figure 10 percent over the rates is considered to be the maximum parking allowed.

Shared Parking Adjustments

The peer communities allow consideration of reductions in parking needs reflecting shared parking between differing uses, as follows:

- **Truckee** – Up to 25 percent reduction can be allowed, based upon a parking study. The most remote space must be within 500 feet from the use it is intended to serve, measured along the walking route.

- **Park City** – Can be considered for projects in Master Planned Developments or requiring a conditional use permit, requiring over 8 spaces. Parking study required, considering overall of parking needs and other factors (such as transit and pedestrian access).

- **Mammoth Lakes** – The number of required spaces may be reduced up to the number of spaces required for the least intensive use.

- **Aspen** – Shared parking reductions may be allowed, though not for purposes of calculating in lieu fees.

- **Lake Placid** – "Shared parking areas serving two or more uses is encouraged and may be required..." The Review Board may reduce the total number of parking spaces required where it can be demonstrated that one or more uses will be generating a demand for parking spaces primarily during periods when other uses are not in operation.

In comparison, the current North Tahoe regulations allows for consideration of shared parking, so long as (1) the uses have different peak periods, (2) the parking demand will not overlap, and (3) the parking facility will meet the peak demand.

Adjustments for Non-Auto Modes

Of the peer communities, only Aspen's parking regulations specifically mention reductions in parking requirements reflecting non-auto modes, in that it allows for a special review process that can consider reductions in parking needs associated with proximity to mass transit. None identify a quantitative factor. The current North Tahoe requirements allow for reductions of up to 20 percent if an analysis indicates that "*transit service exists within 300 feet of the property and such a substitute measure would be a viable substitute for parking. For each space reduced, the project shall be required to contribute $300 per year or the fee required by the transit provider to the transit agency providing the service." (p 12-3).*

Off-Site Parking

The current North Tahoe regulations allow parking requirements to be met using offsite parking that is either within 300 feet of the facility or directly connected by transit. In comparison, the peer communities indicate the following:

- **Truckee** – Offsite parking is allowed, contingent on approval, for parcels within 300 feet of the parcel generating the parking need. A deed restriction is required.

- **Mammoth Lakes** – Offsite parking is allowed within 300 feet, so long as access does not require crossing an arterial street. A recorded parking agreement is required.

- **Aspen** – A review process is identified that may result in approval of off-site parking.

On-Street Parking

Jurisdictions typically do not allow on-street parking in public rights-of-way to count towards a project's parking requirements. For instance, the current North Tahoe regulations indicate that "*Except when included in an assessment district, on-street parking shall not be considered in determining the adequacy of parking facilities." (p12-3).* Among the peers, the only exception is Truckee, where a landowner is allowed to develop new on-street parking in the public right-of-way (pending Town approval), and count such spaces towards the overall parking supply at a rate of 0.75 of an on-site parking space. No restrictions can be placed on the use of the parking space by others.

Treatment of Lockoff Units

An increasingly common practice in the resort lodging industry are "lockoff" units, which are separate bedrooms (sometimes with kitchenette amenities) that have separate entrance doors and internal doors to other bedrooms, allowing them to be "locked off" and rented as a separate, smaller unit at times. A review of the peer communities yielded the following:

- Aspen requires that all lockoff units be considered as separate units for purposes of calculating parking needs.

- Park City requires lockoff units included in a single family or duplex resident to be considered as a separate unit, but does not consider lockoff units regarding hotel/motel land uses. Summit County Utah (where Park City is located) requires 1 space per 1-bedroom lodging unit, 1.5 spaces for lodging units of two or more bedrooms, and 0.5 spaces per lockoff unit (applied to all lockoff units).

None of the other peer communities discuss lockoff units in their parking regulations.

Existing Peer Parking Design Standard

The parking regulations of the peer mountain resort communities were also reviewed regarding parking design elements and bicycle parking requirements. This information, shown in Table 11, can be summarized as follows:

- The peer communities generally require a standard space 9' in width and 18' in length. Only Mammoth Lakes requires a larger space (10' X 20'), while Aspen only requires width of 8' 6". In comparison, the current North Lake Tahoe standard is 9' by 22'.

- Aisle width is generally required to be 24' for a 90-degree parking bay, consistent with the current North Lake Tahoe requirement. The only peer community providing a dimension for minimum 60-degree parking aisle width requires 16', which is 2 feet less than the North Lake Tahoe requirements.

- Of the peer communities, only Truckee allows compact spaces (up to 25 percent, and only in lots of at least 20 spaces) that count towards the total parking requirement. The current North Lake Tahoe requirements allow up to 20 percent compact spaces. Truckee's dimensions (8' by 14') reflect a length 2 feet shorter than the North Lake Tahoe requirement.

TABLE 11: Peer Community Parking Code Elements

	North Lake Tahoe	Truckee	Mammoth Lakes	Aspen	Lake Placid	Breckenridge	Park City
Standard Dimensions							
Parking Space Width	9'	9'	10' (2)	8' 6"	9'	9'	9'
Parking Space Length	22'	20' (1)	20' (2)	18'	18'	18'	18'
90-Degree 2-Way Aisle Width	24'	24'	24'	NA	26'	24'	24' (3)
60-Degree 1-Way Aisle Width	18'	16'	NA	NA	NA	NA	NA
Parallel Parking Stall Length	NA	24'	24'	NA	NA	25'	NA
Parallel Parking Stall Width	NA	NA	NA	NA	NA	8'	NA
Compact Spaces Allowed?	Yes	Yes, for lots with at least 20 spaces	No	No	No	No	Yes, but do not count towards requirements
Maximum Compact Spaces Allowed	20%	25%	--	--	--	--	--
Compact Parking Space Width	8'	8'	--	--	--	--	9'
Compact Parking Space Length	16'	14'	--	--	--	--	16'
Parking Lot Interior Landscaping	Required for parking areas > 1/4 acre. Parking bays should not exceed 75' in length, with at least 1 tree per 4 spaces	200 SF of landscaping, 2 trees and 4 shrubs per 5 parking spaces	None	For every lot with >7 spaces, provide 20 SF of landscaping with 1 tree for every 4 spaces	Lots of >50 Spaces require landscaping island at least 10' wide	25 SF per parking space, with a minimum of 200 SF	20% of total parking area for lots > 50 spaces, 10% for smaller lots. Island with minimum width of 5' every 12 to 15 spaces
Required Snow Storage	"Functional in placement and adequate in size" (4)	50% of parking/driveway area in areas with <200 #/sf snow load, 75% in areas of higher snow load	60% of uncovered parking and driveway area	NA	"Adequate provisions for snow removal and storage."	60 SF per parking space	15% of total hard surface
Bicycle Parking							
Land Uses Requiring Bicycle Parking	None	Multifamily Residential > 10 units	None	None	Public, commercial, industrial and multifamily uses.	None	New construction or addition to commercial, industrial or MFDU
Bicycle Parking Requirement	None	5% of vehicle spaces	None	None	At least 1 bicycle rack must be provided	None	10% of auto spaces, minimum of 3. If >15, may be reduced by Planning Dept.

Note 1: 2' bumper overhang allowed.
Note 2: 9' X 18' for enclosed spaces.
Note 3: 18' for commercial requiring less than 5 spaces.
Note 4: Or have a recorded easement or similar arrangement to remove and store snow offsite.

- With the exception of Mammoth Lakes, all of the peer communities require interior landscaping of parking lots, at least for larger lots (as does North Lake Tahoe). The required amount of landscaping and how it is calculated varies substantially.

- The provision of adequate snow storage is a key design consideration in mountain communities. All of the peer communities have some stated requirement for adequate snow storage, with the exception of Aspen. Four have quantitative requirements based on number of parking spaces or pavement area, while Lake Placid (like North Lake Tahoe) only cites that adequate snow storage must be provided. The Town of Truckee's Code has an interesting approach, in that the quantitative snow storage area requirement varies between high snow load areas (such as Tahoe Donner) and low snow load areas (such as Glenshire).

- Bicycle parking is required for larger multifamily developments in Truckee, and for multifamily, public, commercial and industrial developments in Lake Placid and Park City. In comparison, there is currently no bicycle parking requirement in North Lake Tahoe. However, the proposed Placer County Tahoe Basin Area Plan is proposing that the number of short-term bicycle parking spaces be at least 10 percent of the required automobile parking spaces with a minimum of two spaces per establishment for Recreation, Education, and Public Assembly Uses; Retail Trade; and Personal Service uses. Truckee and Park City tie the number of bicycle parking spots to the number of required auto spaces, while Lake Placid simply requires at least one bicycle rack.

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Chapter 5
Analysis of Parking Rates and Travel Modes

This chapter first presents data regarding parking demand available from national publications. In addition, an evaluation is provided that compares the observed parking utilization in Tahoe City and Kings Beach with the parking required under the current North Tahoe requirements. In addition, recent survey information regarding travel mode characteristics in the North Tahoe area is presented. Along with the peer community rates discussed in the previous chapter, this information is used as the basis for parking rate recommendations, as presented in Chapter 7.

Review of Other Sources of Parking Demand Data

There are two key comprehensive sources of parking demand data that reflect observed parking use by land use category across the nation:

- *Parking Generation (4th Edition)* was published by the Institute of Transportation Engineers (ITE) in 2010. It presents observed parking demand rates for 106 individual land use types, based upon studies voluntarily submitted to the ITE by local jurisdictions and consultants across the nation. The preponderance of the data reflects suburban settings, and thus reflect the travel characteristics found in such settings. The number of observations (and resulting statistical validity) varies substantially by land use type. As an example, the data reflects a total of 190 individual study sites for the general office land use. The data is summarized to the degree statistically valid given the available data. For purposes of this study, the average rate (that rate at which 50 percent of the observed sites generated greater parking demand and 50 percent generated less) as well as the 85th percentile rate (that rate at which 15 percent of observed sites generated greater parking demand) are summarized.

- *Shared Parking (2nd Edition)* was published in 2005 by the Urban Land Institute (ULI). Along with a detailed methodology for evaluating the shared parking demand of mixed-use developments, it presents recommended base parking rates for 23 key land use types based upon the consensus of a panel of parking experts. Note that not all land use categories in the current North Tahoe code are discussed in this document.

Table 12 presents a comparison of the existing North Tahoe rate with the ITE and ULI rates for residential, lodging and entertainment land uses, while Table 13 provides a similar table for retail, industrial, wholesale/storage, public service and recreation uses. Where necessary, estimates of typical use patterns (such as number of seats per thousand square feet of floor area) are applied in order to provide the comparison. Uses for which the current North Tahoe code has higher rates than the other source are shaded in green, those for which a lower rate is required are shaded in red, and those with comparable rates are shaded in yellow.
A review of these tables indicates the following general conclusions:

- The current North Tahoe requirements are **consistently higher** than the rates in the other sources (indicating a potential for reduced rates) for the following land use categories:

    - Larger (2+ bedrooms) multifamily units
    - Ice rink
    - Auditorium
    - Health Care Services

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TABLE 12: Comparison of North Tahoe, ITE and ULI Parking Demand Rates -- Residential, Lodging, Entertainment and Services Uses

	North Lake Tahoe Existing Rate (1)		ITE Peak Parking Demand (2)					ULI Parking Recommendation (3)		
			Rate (Spaces per Unit)							
Category	Rate (Spaces per Unit)	Unit	Average	85th Percentile	Unit	LSC Notes	NT Higher/Lower than ITE 85th?	Rate (Spaces per Unit)	Unit	NT Higher/Lower than ULI Recommendations?
Residential										
Multiple Family Dwelling (4)	0.5	Bed AND	1.23	1.94	Unit	Weekday, Suburban (Average Size 1.7 br)	Lower for small units, but higher for larger units	1.65	Rented Unit OR	Lower for small units, but higher for larger units
	0.5	Bedroom						1.85	Owned Unit	
Multi-Person Dwelling	0.6	Bed AND	n/a				n/a	n/a		n/a
	1	Live-In Employee								
Congregate Care or Assisted Living	0.33	Bed AND	0.41	0.54	Unit		Not comparable	0.35	Unit	Not comparable
	1	Employee								
Residential Care	0.45	Bed AND	0.41	0.54	Unit	Assisted Living: weekday	Depends on # of employees but similar	0.5	Bed	Depends on # of employees but similar
	1	Live-In Employee AND								
	0.5	Other Employee								
Single Family Dwelling (5)	2	Unit	1.83	2.14	Unit	Single Family: Weekday	Lower			
Tourist Accommodation										
Hotel, Motel, and Other Transient Dwelling Units (6)	1	Unit AND	1.29	1.59	Occupied Room	Resort Hotel: Weekday	At average of 0.6 employees onsite per room at peak, and half part time employee, total NT rate would be roughly 1.27 per room -- very close to average but 20% lower than 85th.	1.25	Room, plus spaces for lounge, restaurant, conference space	Comparable
	4	KSF Meeting/ Display Area AND								
	2.5	Commercial/ Retail Area AND								
	0.33	Part-Time Employee at Peak AND								
	0.5	Full-Time Employee at Peak AND								
	1	Full-Time Admin Employee at Peak								
Entertainment										
Bowling	5	Lane	5.02	5.58	Lane	Friday	Lower			
Health Spa/Gym	3.33	KSF GFA	5.27	8.46	KSF GFA	Weekday	Lower	7	KSF GFA	Lower
Ice/Roller Rink	5	KSF GFA AND	0.5	n/a	KSF GFA	Average of Saturday and Friday Studies.	Higher	n/a		n/a
	1	Full-Time Employee								
Tennis (Indoor), Racquetball, etc.	1	Employee AND	3.56	4.13	Court		Probably lower, but depends on # of emps	n/a		n/a
	3	Court								
Theater	1	Employee AND	0.26	0.36	Seat	Movie Theater: Friday	Similar, at typical employees per seat.	0.27	Seat	Higher
	0.33	Seat								
Auditorium	1	Full-Time Employee AND	0.25	0.32	Seat	Weekend	Higher	0.4	Seat	Higher, at typical seats per KSF
	6.67	KSF GFA AND								
	0.33	Seat								
Cabaret	0.5	Employee AND	5.57	n/a	KSF GFA	Average of 2 Saturday studies	Not Comparable			
	0.25	Seat								
Convention	1	Full-Time Employee AND	0.31	n/a	Attendee	Had extensive transit service	Not Comparable	6	KSF GFA	Lower
	2.5	KSF GFA								
Services										
Financial Services	5	KSF GFA	4	5.67	KSF GFA		Lower			
Health Care Services	0.5	Employee AND	4.94	4.96	KSF GFA		Higher	4.5	KSF GFA	Higher
	6.67	GFA								
Laundries and Dry Cleaning Plant	2	KSF Non-Storage Area AND	1.4	2.44	KSF GFA		Lower			
	1	KSF Storage Area								
Professional Offices	4	KSF GFA	2.84	3.45	KSF GFA	Weekday, Suburban	Higher	3.8	KSF GSA	Slightly higher
Schools - Business and Vocation	13.3	KSF GFA AND	0.18	0.2	School Population	Junior/Community College	Not Comparable			
	1	Employee								
Schools - Preschool	1	Employee AND	3.16	3.7	KSF GFA	OR .24/Student OR 1.38/Employee	Not Comparable	0.3	Child Capacity	Comparable
	0.2	Student								

1. Source: Standards & Guidelines for Signage, Parking and Design -- Lake Tahoe Region of Placer County North Tahoe Community Plans, TRPA and Placer County, June 1994
2. Parking Generation, 4th Edition
3. Source: Dimensions of Parking, 5th Edition, Urban Land Institute, 2010.
4. Use for Employee Housing.
5. Use for Summer Homes
6. Use for Bed and Breakfast, Time Sharing Hotel/Motel, Time Share

KSF = One Thousand Square Feet
GFA = Gross Floor Area
Employee = Number of Employees on Largest Shift

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TABLE 13: Comparison of North Tahoe, ITE and ULI Parking Demand Rates -- Retail Industrial, Wholesale/Storage, Public Service and Recreation Uses

Category	North Lake Tahoe Existing Rate (1)		ITE Peak Parking Demand (2)				NT Higher/Lower than ITE 85th?	ULI Parking Recommendation (3)		
	Rate (Spaces per Unit)	Unit	Rate (Spaces per Unit) Average	85th Percentile	Unit	LSC Notes		Rate (Spaces per Unit)	Unit	NT Higher/Lower than ULI Recommendations?
Retail										
Building Material and Hardware	3.33	KSF GFA AND	1.69	n/a	KSF GFA	Suburban	Higher	2.5	KSF GFA, including outdoor sales area	Higher
	5	KSF Gross Site Area								
Eating and Drinking Places	10	KSF GFA OR	At typical 32 seats per KSF, the rate per KSF is controlling.							
	0.25	Customer or Seat (whichever higher)								
Nightclub	*Not a Defined Use in the North Tahoe Com. Plan*						Lower	19	KSF GFA	Lower
Quality Restaurant	*Not a Defined Use in the North Tahoe Com. Plan*		16.4	22.7	KSF GFA	OR .46/Seat (Sat)	Lower	20	KSF GFA	Lower
High-Turnover Sit-Down Restaurant	*Not a Defined Use in the North Tahoe Com. Plan*		16.3	20.4	KSF GFA	OR .47/Seat (Sat with Bar)	Lower	15	KSF GFA	Lower
Fast Food Without Drive-Through	*Not a Defined Use in the North Tahoe Com. Plan*		12.4	14.5	KSF GFA	OR .52/Seat	Lower	15	KSF GFA	Lower
Food And Beverage Retail Sales	6.67	KSF GFA	3.78	5.05	KSF GFA	Supermarket: Wkdy, Suburban	Higher	6.75	KSF GFA	Comparable
Furniture, Home Furnishing and Equipment -Furniture	2	KSF Non-Storage Area AND	1.04	1.34	KSF GFA		Higher, assuming typical proportion of non-storage to storage areas	n/a		n/a
	1	KSF Storage Area								
General Merchandise Stores - Convenience Store	6.67	KSF GFA	3.11	3.79	KSF GFA	Convenience Market: Only 2 sites	Higher	2.75	KSF GFA	Higher
Light Industrial										
Industrial Services	2.86	KSF GFA	1.27	1.85	KSF GFA		Higher	n/a		n/a
Printing and Publishing	2	KSF Non-Storage Area AND	3	n/a	KSF GFA	Base on only one study	Lower	n/a		n/a
	1	KSF Storage Area								
Small Scale Manufacturing	2.5	KSF GFA	0.75	1.13	KSF GFA		Higher	n/a		n/a
Wholesale/Storage										
Warehousing	1	KSF GFA	0.51	0.81	KSF GFA	weekday	Higher	0.67	KSF	Higher
Mini-warehouse	0.2	Rental Unit AND	0.0135	0.0166	Unit	weekday	Higher	0.0175	Unit	Higher
	1	Employee								
Public Service										
Churches	0.33	Seat	8.37	14.38	KSF GFA	OR .2/seat	Higher	0.25	Permitted Capacity	Higher
Day Care Centers	1	Employee AND	3.16	3.7	KSF GFA	OR .24/Student OR 1.38/Employee	Not Comparable	0.3	Child Capacity	Comparable
	0.2	Student								
Government Offices	4	KSF GFA	4.15	6.13	KSF GFA	OR .83/Employee	Comparable	n/a		n/a
Hospitals	0.5	Employee AND	4.49	7.35	Bed	Weekday Suburban	Not Comparable	n/a		n/a
	0.5	Bed AND								
	3.33	KSF Emergency Room Area								
School - Colleges	1	Employee AND	0.33	0.38	School Population (Students, Faculty, Staff)	Suburban	Higher	n/a		n/a
	0.5	Full-Time Student AND								
	0.25	Seat in Auditorium etc. AND								
	10	KSF Non-Class Room Meeting Area								
School - Elementary	1	Employee AND	0.17	0.21	Student		Higher, iif strictly defining non-classroom area	0.25	Student OR	Higher, iif strictly defining non-classroom area
	20	KSF Non-Classroom Area						0.2	Auditorium seat (8)	
School - High School	1	Employee AND	0.23	0.25	Student	Suburban	Higher	0.3	Student OR	Higher
	0.33	Student AND						0.3	Auditorium seat (8)	
	0.25	Seat in Auditorium etc. AND								
	10	KSF Non-Classroom Meeting Area								
Recreation										
Recreation Centers	1	Full-Time Employee AND	3.2	5.03	KSF GFA		Lower, assuming no more than 2 employees per KSF	0.25	Permitted Capacity	Not Comparable
	2	KSF GFA								
Tennis	0.33	Court	2.83	n/a	Court	Average of 2 studies	Lower	n/a		n/a
Golf Course	1	Full-Time Employee AND	8.68	9.83	Hole	Saturday	Higher	n/a		n/a
	0.33	Part-Time Employee AND								
	10	Hole								
Marinas	1	Full-Time Employee AND	0.47	n/a	Berth	Average of Sat and Sun, Including Memorial Day.	Lower	n/a		n/a
	0.33	Mooring or Slip								

1. Source: Standards & Guidelines for Signage, Parking and Design -- Lake Tahoe Region of Placer County North Tahoe Community Plans, TRPA and Placer County, June 1994
2. Parking Generation, 4th Edition
3. Source: Dimensions of Parking, 5th Edition, Urban Land Institute, 2010.

KSF = One Thousand Square Feet
GFA = Gross Floor Area
Employee = Number of Employees on Largest Shift

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- Professional Offices
- General Merchandise Stores
- Building Material and Hardware
- Furniture, Home Furnishings
- Small Scale Manufacturing
- Industrial Services
- Warehousing / Mini-warehousing
- Churches
- Colleges
- Elementary Schools
- High Schools
- Golf Course

- The current North Tahoe requirements are **consistently lower** for the following land use categories:

    - Studio or one bedroom multifamily units
    - Health Spa/Gym
    - Eating and Drinking Places (restaurants and nightclubs)
    - Printing and Publishing
    - Recreation Centers / Tennis
    - Marinas

For other land uses, the rates are comparable, it is not possible to directly compare the rates without detailed information about a specific project, or the North Tahoe rate falls between the reported rates in the other two sources.

Evaluation of Observed North Tahoe Parking Demand By Current Code

The observed parking counts provide the opportunity to assess the appropriateness of current North Tahoe parking rates by comparing observed parking demand with the demand that would be expected if the current rates reflected actual use. For both Tahoe City and Kings Beach commercial core areas, an inventory of existing land use (excluding uses currently vacant or undergoing renovation) was developed based upon County Assessor records, aerial photos, and site visits. Wholly residential uses were excluded, though residential units in mixed developments were included (such as the numerous small retail/restaurant properties in Kings Beach).The current Community Plan *Standards and Guidelines* rates were then applied, along with factors reflecting the proportion of peak demand that would be expected at the time of overall observed peak parking (2 PM hour on a Saturday). For "special generator" land uses for which a demand rate is not available (such as beach use), parking use was estimated based upon observed parking patterns, number of attendees, and typical vehicle occupancy ratios. These special generators, the fact that few land uses have dedicated on-site parking sufficient to accommodate all parking demand (resulting in parking occurring offsite), and the impacts of construction introduces uncertainty into this analysis. However, it provides the best available overall indication of how current codes compare with observed parking use in the North Tahoe area.

Kings Beach

Table 14 presents the estimated inventory of land uses that were in use in the Kings Beach commercial core area (consistent with the area shown in Figure 1, above) during the parking

TABLE 14: Kings Beach Existing Occupied Land Use Quantities

Zone	Bank KSF	Retail KSF	Grocery KSF	Building Material / Hardware KSF	Office KSF	Medical Office KSF	Restaurants / Nightclubs KSF	Spa, Personal Services KSF	Gas Station / Minimart KSF	Auto KSF	Dwelling Units Units	Hotel / Motel Rooms	**Special Generator**
1 Safeway and Brockway Golf Course	0.0	0.0	38.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	Golf Course
2 North Tahoe Beach	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	North Tahoe Beach
3 267 to Secline North of 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0	0	Secline Beach
4 267 to Secline South of 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0	0	Secline Beach
5 Secline to Deer North of 28	0.0	6.7	0.0	5.8	0.0	2.9	0.0	0.0	0.0	0.0	25	40	
6 Secline to Deer South of 28	0.0	0.5	0.0	0.0	1.1	2.5	4.7	0.5	0.0	0.0	6	108	Secline Beach
7 Deer to Bear North of 28	0.0	3.1	0.0	0.0	0.0	0.0	2.4	0.0	1.7	0.0	22	12	KBSP Beach
8 Deer to Bear South of 28	0.0	4.2	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0	0	KBSP Beach, Event Center
9 Bear to Coon North of 28	1.2	0.0	4.3	0.0	20.6	0.0	7.0	1.6	2.2	0.0	28	0	KBSP Beach
10 Bear to Coon South of 28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	KBSP Beach
11 Coon to Fox North of 28	0.0	6.6	2.0	0.0	8.2	0.8	3.2	1.2	0.0	0.0	7	0	
12 Coon to Fox South of 28	0.0	4.3	0.0	0.0	1.5	0.0	7.6	0.0	0.0	0.0	1	0	KBSP Beach
13 Fox to Chipmunk North of 28	0.0	5.5	0.0	0.0	0.0	0.0	4.2	1.0	0.0	0.0	7	0	KBSP Beach
14 Fox to Chipmunk South of 28	0.0	2.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3	33	KBSP Beach
TOTAL	1.2	32.9	44.9	5.8	31.4	6.3	32.7	4.3	5.4	3.8	99	193	

Source: Placer County Assessor records, aerial photos, and LSC field visits.

count period. Detailed information is presented in Appendix B. This totals to 168,700 square feet of various commercial and public uses (excluding the North Tahoe Events Center), along with 193 lodging rooms and 99 multifamily dwelling units. Major commercial land uses consist of 44,900 square feet of grocery stores, 32,700 square feet of restaurants/nightclubs, 32,900 square feet of retail space, and 31,400 square feet of office space.

The resulting estimate of parking demand by district is shown in Table 15. For uses with a parking rate partially dependent on number of employees, factors reflecting typical employees per thousand square feet of floor area were applied. Day-of-week and time-of-day parking demand factors were obtained from *Shared Parking*. As shown, this analysis indicates that the current parking requirements plus the parking demand generated by the special generators would result in an area-wide observed parking total of 1,502 vehicles. In comparison, a maximum of 1,347 vehicles were observed to be parked. This indicates that the current requirements, if fully applied to all land uses, would result in approximately 155 more parking spaces than are currently used, or an excess of 12 percent. Code requirements exceeded observed parking in 9 of the 14 analysis districts, but fell below observed parking in the remaining 5.

A detailed review was conducted of parking demand at other times of day (particularly regarding the evening uses) and of code versus observed parking in individual private lots (for the limited number of businesses in the area with significant onsite parking). This review yielded the following findings specific to the Kings Beach area:

- Parking demand in some areas with concentrations of retail uses (such as Districts 5 and 13) indicate that the current retail rate is too high. This may reflect to a degree the economic health of various businesses. The observed parking demand in the Rite Aid lot, however, is consistent with the current parking code requirements.

- Some areas with ~~areas with~~ concentration of restaurant uses (such as Districts 6 and 9) have an observed parking utilization that indicates restaurant rates are too high, though this again may reflect the specific characteristics of these businesses. Other areas (notably District 12 and District 13 that includes Caliente) indicate that the restaurant rates are too low.

- Observed Safeway lot parking utilization was slightly lower than required under the current code (though there may well be higher utilization at other times, such as a winter Friday evening).

- Observed parking at Sierra Country Tires exceeded the parking requirements.

Tahoe City

The existing in-use land use inventory for the Tahoe City study area is presented in Table 16. Total commercial/public floor area was estimated at 423,500 square feet (or 2.5 times that of Kings Beach), along with 159 lodging rooms and 1 multifamily dwelling unit. Relatively large commercial uses are office space (113,100 square feet of floor area), retail space (107,400 square feet) and restaurant/nightclub space (79,000 square feet). Note that these figures reflect current occupancy, including the fact that the Lighthouse Center is partially under renovation.

Applying the current parking requirements and hour-of-day/day-of-week factor yields the parking demand estimates shown in Table 17. Over the entire area, the land uses generate a "code"

TABLE 15: Kings Beach Existing Land Use Parking Demand at Current Code

Zone	Land Uses With Parking Codes: Bank KSF	Retail KSF	Grocery KSF	Building Material / Hardware KSF	Office KSF	Medical Office KSF	Laundry KSF	Athletic Club KSF	Restaurants / Nightclubs KSF	Spa / Personal Services KSF	Gas Station / Minimart KSF	Auto KSF	Dwelling Units Units	Hotel / Motel Rooms	Marina, Pier Slips/ Buoys	Subtotal: Excluding Special Generators	Special Generator: Land Use	Special Generator: Estimated Parking Demand	Total Code Parking Demand	Observed Peak Parking Demand	Ratio of Code Requirement to Observed Parking
Current Code Parking Rate	5.00	6.67	6.67	3.33	4.00	7.67	1.75	3.33	10.00	3.33	3.33	3.00	2.00	1.27	0.347730496						
Percent of Peak Demand at Time of Overall Peak	10%	100%	95%	100%	6%	30%	80%	30%	65%	100%	100%	100%	90%	70%	100%						
1 Safeway and Brockway Golf Course	0	0	244	0	0	0	0	0	0	0	0	0	0	0	0	244	Golf Course	44	288	226	127%
2 North Tahoe Beach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	North Tahoe Beach	50	50	43	116%
3 267 to Secline North of 28	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	Secline Beach	12	23	28	82%
4 267 to Secline South of 28	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	Secline Beach	20	25	22	114%
5 Secline to Deer North of 28	0	45	0	19	0	7	0	0	0	0	0	0	45	36	0	152		0	152	108	141%
6 Secline to Deer South of 28	0	3	0	0	0	6	0	0	31	2	0	0	11	96	0	149	Secline Beach	10	159	122	130%
7 Deer to Bear North of 28	0	21	0	0	0	0	0	0	15	0	6	0	40	11	0	93	KBSP Beach	21	114	128	89%
8 Deer to Bear South of 28	0	28	0	0	0	0	0	0	17	0	0	0	0	0	0	45	KBSP Beach, Event Center	93	138	109	127%
9 Bear to Coon North of 28	1	0	27	0	5	0	0	0	45	5	7	0	50	0	0	140	KBSP Beach	22	162	122	133%
10 Bear to Coon South of 28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KBSP Beach	40	40	40	100%
11 Coon to Fox North of 28	0	44	13	0	2	2	0	0	21	4	0	0	13	0	0	99	KBSP Beach	25	124	124	100%
12 Coon to Fox South of 28	0	29	0	0	0	0	0	0	49	0	0	0	2	0	0	80	KBSP Beach	14	94	106	89%
13 Fox to Chipmunk North of 28	0	37	0	0	0	0	0	0	28	3	0	0	13	0	0	81	KBSP Beach	14	95	80	119%
14 Fox to Chipmunk South of 28	0	13	0	0	0	0	0	0	6	0	0	0	5	29	0	53	KBSP Beach	21	74	89	83%
Total	1	220	284	19	7	15	0	0	212	14	18	11	179	172	0	1152		386	1538	1347	114%
Subtotal: Core Area (Zone 5 to 14)	*1*	*220*	*40*	*19*	*7*	*15*	*0*	*0*	*212*	*14*	*13*	*0*	*179*	*172*	*0*	*892*		*260*	*1152*	*1028*	*112%*

Note: Some parking code requirements simplified for purposes of this analysis.

TABLE 16: Tahoe City Existing Occupied Land Use Quantities

Zone	Bank KSF	Retail KSF	Grocery KSF	Building Material / Hardware KSF	Office KSF	Medical Office KSF	Laundry KSF	Athletic Club KSF	Restaurants / Nightclubs KSF	Spa, Personal Services KSF	Gas Station / Minimart KSF	Auto KSF	Dwelling Units Units	Hotel / Motel Rooms	Marina, Pier Slips/ Buoys	Special Generator
1 Fairway Dr	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0	0	0	
2 64 Acres and S of Truckee River	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0	0	0	Rafting, Trail Access, SRA
3 South Wye Area	0.0	0.0	0.0	0.0	20.0	2.0	0.0	0.0	3.8	0.0	0.0	0.0	0	0	0	Rafting Firms, SRA
4 North Wye Area	2.7	8.0	29.7	5.3	4.4	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0	0	0	Golf Course
5 Commons Beach Area - Both Sides of SR 28	0.0	7.0	0.0	10.4	10.1	0.0	0.0	0.0	21.8	1.2	0.0	1.2	0	49	0	Commons Beach
6 Mid Tahoe City to Grove Street	0.0	41.7	0.0	0.0	10.3	0.0	2.5	4.0	16.2	2.3	0.0	0.0	0	8	0	
7 North of SR 28, East of Grove Street	11.2	0.0	0.0	0.0	26.1	4.0	0.0	4.4	0.0	0.0	0.0	0.0	1	72	0	Commons Beach, Ballfield
8 Tahoe City Marina Area	0.0	9.1	0.0	0.0	9.1	0.0	0.0	0.0	6.1	1.5	0.0	0.0	0	0	282	
9 Safeway and Boatworks Area	2.7	41.5	18.0	0.0	22.1	0.0	0.0	6.3	28.3	0.0	0.0	0.0	0	30	0	Tahoe Gal, Post Office
Total	26.2	107.4	47.7	15.6	113.1	6.0	2.5	14.7	79.0	7.7	3.7	1.2	1	159	282	

Source: Placer County Assessor records, aerial photos, and LSC field visits.

TABLE 17: Tahoe City Existing Land Use Parking Demand at Current Code

	Land Uses With Parking Codes																			
	Bank	Retail	Grocery	Building Material / Hardware	Office	Medical Office	Laundry	Athletic Club	Restaurants / Nightclubs	Spa / Personal Services	Gas Station / Minimart	Auto	Dwelling Units	Hotel / Motel	Marina, Pier	Subtotal: Excluding Special Generators	Special Generator		Total Code Parking Demand	Observed Peak Parking Demand	Ratio of Code Requirement to Observed Parking
Zone	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	Units	Rooms	Slips/ Buoys		Land Use	Estimated Parking Demand			
Current Code Parking Rate	5	6.67	6.67	3.33	4	7.67	1.75	3.33	10	3.33	3.33	3	2	1.27	0.347730496						
Percent of Peak Demand at Time of Overall Peak	10%	100%	95%	100%	6%	30%	80%	30%	65%	100%	100%	100%	90%	70%	100%						
1 Fairway Dr	0	0	0	0	3	0	0	0	0	0	12	0	0	0	0	15		0	15	29	52%
2 64 Acres and S of Truckee River	5	0	0	0	0	0	0	0	17	0	0	0	0	0	0	22	Rafting, Trail Access, SRA	349	371	376	99%
3 South Wye Area	0	0	0	0	5	5	0	0	25	0	0	0	0	0	0	35	Rafting Companies, SRA	163	198	186	106%
4 North Wye Area	1	53	188	18	1	0	0	0	0	9	0	0	0	0	0	270	Golf Course	20	290	138	210%
5 Commons Beach Area - Both Sides of SR 28	0	47	0	34	2	0	0	0	142	4	0	4	0	44	0	277	Commons Beach	64	341	158	216%
6 Mid Tahoe City to Grove Street	0	278	0	0	2	0	4	4	105	8	0	0	0	7	0	408		0	408	172	237%
7 North of SR 28, East of Grove Street	6	0	0	0	6	9	0	4	0	0	0	0	2	64	0	91	Commons Beach, Ballfield	130	221	294	75%
8 Tahoe City Marina Area	0	61	0	0	2	0	0	0	40	5	0	0	0	0	98	206		0	206	126	163%
9 Safeway and Boatworks Area	1	277	114	0	5	0	0	6	184	0	0	0	0	27	0	614	Tahoe Gal, Post Office	44	658	314	210%
Total	13	716	302	52	26	14	4	14	513	26	12	4	2	142	98	1,938		770	2,708	1,793	151%
Subtotal - Core Area (Zones 5 to 9)	7	663	114	34	17	9	4	14	471	17	0	4	2	142	98	1,596		238	1,834	1,064	172%

Note: Some parking code requirements simplified for purposes of this analysis.

parking demand of 1,596 spaces. In addition, the special generators (rafting/bike trail, state recreation area, golf course, Commons Beach, ball field, post office, Tahoe Gal) are estimated to have generated 770 parked vehicles, for a total of 2,708. In comparison, the observed parking demand was 1,793 parked vehicles, indicating that the current parking regulations result in a calculated parking demand that exceeds the observed demand by 51 percent. The code demand exceeds the observed utilization for all areas south of SR 28. The detailed review of parking demand/utilization by district and by time of day/day of week indicates the following:

- As the Bridgetender parking lot was fully utilized, it is not possible to compare demand with supply for this restaurant.

- Peak parking demand for the Save Mart supermarket was below current code requirements (though peak demand may well occur at differing times of the year).

- The comparison of demand and utilization in Districts 5, 6, 8 and 9 indicate that the rates for retail and restaurant uses are higher than necessary.

- The observed parking in District 8 (Tahoe City Marina area) tends to confirm that the current marina parking rate of 1 space per three berths/buoys is appropriate.

- The high use of the public parking areas in District 7 (including the Jackpine Lot, Grove Street Lot, and the lower Tahoe Lake School parking lot) indicates that drivers are finding these areas, and using them as parking for areas to the south (such as Commons Beach) even though there are spaces available in private lots south of SR 28.

Overall, if the current code requirements were met for all existing land uses, it would result in a substantial "over parking" of the Tahoe City commercial core area, with more parking than it needed to accommodate observed peak parking.

Review of Existing North Tahoe Travel Mode Data

Available travel mode survey data was reviewed to identify whether there is a lower proportion of trips to the commercial core areas than for other areas of the Placer County portions of the Tahoe Region. If so, this could argue for a different parking demand rate in the commercial core areas than for the remainder of the area. The TRPA conducts intercept surveys of persons in recreational and commercial centers. The most recent summer survey is presented in the *Travel Mode Share Survey Summary of Results* (TRPA, October 2010). It presents the results of 334 individual surveys conducted at locations in Placer County. These were conducted by surveyors stationed at various locations in public areas and sidewalks in the commercial centers in Kings Beach and in Tahoe City. Other areas surveyed in the Placer County portion of the Tahoe Region included Homewood, Tahoe Vista, and Sunnyside. Among other questions, persons were surveyed as to their travel mode used to access the location.

As shown in Table 18, of the 334 respondents throughout the Placer County locations, 78 percent indicated they arrived by auto. In comparison, the figure for Tahoe City was 76 percent, for Kings Beach was 81 percent, and for the remainder of the survey sites was 75 percent. The proportion walking was higher in Kings Beach (11 percent) and Tahoe City (7 percent) than for the other locations (4 percent). Similarly transit use was higher in Kings Beach (3 percent) and Tahoe City (2 percent) than for the other locations (0 percent). Regarding bicycle use, Tahoe City use (10 percent) was slightly lower than the other locations (13 percent), while the Kings Beach figure (2 percent) was substantially lower. This low bicycle use in Kings Beach is

TABLE 18: Tahoe City and Kings Beach Travel Mode Survey Results

Trip Category	Travel Mode					Total Survey Responses
	Auto	Bike	Walk	Transit	Other	
Tahoe City	76%	10%	7%	2%	4%	143
- Commercial / Other	79%	9%	5%	2%	5%	86
- Recreation	71%	13%	11%	2%	4%	56
Kings Beach	81%	2%	11%	3%	3%	139
- Commercial / Other	75%	2%	14%	7%	3%	59
- Recreation	86%	3%	9%	0%	3%	78
Placer County - Other Locations	75%	13%	4%	0%	8%	52
Total North Tahoe	78%	7%	8%	2%	4%	334

SOURCE: TRPA 2010 Summer Surveys

Tahoe2010_Data for NTParking.xlsx

probably a reflection of the currently poor cycling conditions in the community. Furthermore, the relatively high bike use in the other locations probably reflects a low sample size and the cycling activity associated with the West Shore bike trail. Perhaps reflecting the limited bicycle facility network serving Kings Beach, the proportion of travel by bicycle in Kings Beach was low in comparison with Tahoe City (though walking was higher). Once the Kings Beach Commercial Core project improves bicycling and pedestrian conditions in Kings Beach, an overall auto mode split within the two key commercial core areas roughly 5 percent below the remainder of the region can be expected.

Chapter 6
Parking Finance and Regulation

Parking Finance

There are a variety of state and federal funding programs that may fund parking improvements as a piece of a larger project. One example is the Community Development Block Grant program administered by the Department of Housing and Community Development, whereby parking needed to support a larger urban development project could be funded. Similarly, State Transportation Improvement Program (STIP) funds may be used for transportation corridor improvement projects that include parking improvements needed to meet the overall project goals. However, barring inclusion in a larger project, there are no funding programs to directly support parking facilities as a stand-alone project. Funding for public parking improvements is thus very much a local issue.

Vehicle Parking District

In California, parking improvements can be constructed and maintained under the *Parking District Law of 1943* and the *Parking District Law of 1951*. These laws allow the formation of levy assessment districts to finance the acquisition of land (including the issuance of bonds), the improvement, construction and maintenance of parking facilities, the cost of employee salaries, and the costs of engineers, attorneys and others needed to complete the project. Districts are initiated by a petition of landowners, and a landowner vote of approval is required for formation. The resulting district is managed by an appointed commission.

Per the California State Controller's office, there are currently parking districts established in 77 cities across the state, with the majority in the larger urban areas. Nearby parking districts are established in Truckee and Nevada City, though there are currently no established parking districts in Placer County.

Fee-In-Lieu Programs

Fees paid in lieu of required onsite parking are a common strategy in communities both in California and across the nation. By ordinance, a local jurisdiction establishes a fee that can be paid into a public parking program, in order to fund public parking that serves the private development as well as other public parking needs. It is a particularly important tool in commercial areas with small parcel sizes – such as portions of both Kings Beach and Tahoe City – where a requirement to provide parking on site can lead to poor site planning and community design, if not the loss of any ability to economically develop.

On-site provision of parking, moreover, often can conflict with the design goals of redevelopment efforts and the overall Community Plans. A key strategy in commercial streetscape design is to provide a cohesive window-shopping environment close to the sidewalk throughout a commercial "Main Street" area. On-site parking, however, can result in the storefronts being placed behind a row of parking and the sidewalk being interrupted by driveways, both of which work against the effectiveness of the commercial environment. As stated by John McLaughlin, Community Development Director of the Town of Truckee:

"In-lieu fees allow us to create vibrant and great new developments without having to screw up the urban form for the automobile, when we really want to design these places for people!"

Joint development of public parking, moreover, allows better shared use of parking spaces than does provision of on-site private parking. For instance, public parking can serve both the afternoon peak in outdoor recreational parking needs as well as the evening peak in theater parking needs, resulting in a reduction in the overall parking requirements for the commercial district as a whole. Again, any strategy that can help to attain parking requirements with reduced coverage impacts can be a substantial benefit in attaining TRPA's requirements for commercial development. There are also other potential benefits that are discussed in this report.

Flexible Parking Requirements (Thomas P. Smith, 1983) provides a good summary of the "ingredients" necessary for success of an in-lieu program:

"*The likelihood of success in the use of zoning that allows payments of fees-in-lieu of parking is increased when a community can anticipate a rapid rate of development in a concentrated area. Where major developments are proposed, it is more likely that sufficient funds can be collected to help support construction of off-street parking. The funds collected, however, should simply supplement a community's own resources (land, capital, personnel), and these funds should complement an existing program of municipally constructed off-street parking. Where development projects are to be constructed in a concentrated area and the public has the resources and administrative capacity to build and maintain centralized parking, the conditions may be appropriate for collecting fees-in-lieu of required parking spaces.*" (P11)

This document also includes the following quote, which is very pertinent to the Kings Beach and Tahoe City commercial core areas:

"*Off-site parking often can have its greatest application in older developed areas where small lots, multiple landowners, and physical constraints (site broken up by alleys, easements, existing street patterns) prevent the construction of on-site parking.*" (P 11)

Overall, the review of the professional literature revealed the following potential benefits associated with an in-lieu parking fee program:

- An improved urban design can be provided. A key concept in planning for pedestrian commercial districts is to provide as continuous a series of storefronts as possible, avoiding "dead spaces" that break up the window-shopping experience. By reducing the need for driveways and parking provided along the front of commercial properties (which is effectively required at present for those parcels without side or back access), an in-lieu program can result in a more effective and economically vital shopping district.

- The total amount of parking needed to adequately serve the area can be reduced. As public parking is available for shared use, the number of spaces required is lower than if each individual property must provide its peak parking supply on-site. For instance, restaurants can use a higher proportion of a public parking supply in their peak evening period while commercial properties can use a higher proportion in the afternoon. Another example pertinent to the study area is the use of parking for summer beach recreation parking needs as well as for winter snowmobile concessionaire parking needs.

- An in-lieu program provides another mechanism for the provision of parking, thereby reducing the need for variances. This helps to ensure that all landowners are treated equitably.

- Additional funding for public parking improvements is generated, potentially speeding the provision of additional public parking. Funding, moreover, accompanies the development that increases the need for such parking.

- By providing an additional, readily available option for developers to address the often-difficult issue of meeting parking requirements, an in-lieu program increases the feasibility of development or redevelopment – particularly for small lots.

In California, the following jurisdictions are among those that have established existing in lieu parking fee programs: Berkeley, Brentwood, Carmel, Concord, Culver City, Davis, Fairfield, Manhattan Beach, Mountain View, Sacramento, Salinas, San Jose, Truckee, and Walnut Creek. Programs have also been established in Bend and Corvallis in Oregon, Davie, Florida; and Jackson, Wyoming.

The following are possible reasons why an in-lieu fee program may not be appropriate:

- The timeliness of use of funds can be a challenge. Parking Improvement District (PID) programs have run into political trouble where fees have been collected for a long period before any parking spaces have been constructed. Areas where the expected number of projects that would take advantage of the in-lieu program is low may therefore not be appropriate locations for an in-lieu program. As the rate of inflation in construction costs and land prices can outstrip the interest rate gained on the funds, moreover, delays in construction can effectively degrade the ability of the program to result in parking supply. A long lag time between the first collection of funds and the provision of parking has been a problem for some jurisdictions, particularly for smaller communities. For instance, there has been discussion in Sisters, Oregon that the in-lieu program be terminated, as the City has not used the funds to construct public parking in over ten years.

- Parking must be provided in reasonable proximity to the properties contributing fees. To be effective for individual commercial property owners (and their financiers), spaces need to be provided with a reasonable walk distance of each property. Areas where there is no or limited opportunities for public parking facilities may find this to be a problem.

- An in-lieu program can be at odds with other parking strategies that allow reductions. For instance, the *Standards and Guidelines for Signage, Parking and Design* for the North Tahoe Community Plans indicates that "*Parking requirements for uses other than single family dwellings may be reduced up to 20 percent if a traffic analysis indicates transit service exists within 300 feet of the property and such a substitute measure would be a viable substitute for parking.*" This can effectively reduce the funding to the in-lieu program by up to 20 percent.

- Sufficient funding needs to be available (either through the in-lieu program or from other sources) to ensure that parking is actually provided. Particularly if the first few developments taking advantage of an in-lieu program are relatively small (and therefore do

not generate funds sufficient to construct a parking lot), this could require some initial public funding.

- Lenders need to be assured that the financial success of a development will not be limited or precluded by the lack of timely and convenient parking provided through the in-lieu program. Some lenders might be reluctant to lend on a project without on-site parking, or a guarantee for timely and convenient parking.

- The local jurisdiction needs to devote staff time to establishing and maintaining the in-lieu fee program. However, the ongoing staff time needed after the program is implemented is reported to be minimal, and would not require any marginal increase in staff levels. By providing a consistent means of addressing parking requirements (rather than through case-by-case review of private off-site parking agreements), moreover, local staff time spent on parking issues could potentially be reduced.

A key issue in an in-lieu fee program is the appropriate level of the fee. The professional literature, and the way in which fees are established in other California jurisdictions, indicates that there is not any legal requirement that fees levels be set to reflect the full cost of the provision of parking.

Some examples of the potential means by which a program could benefit individual properties helps to illustrate the potential usefulness of a PID:

- The Felte Service and Supply building sits on a parcel in a prime location on the northwest corner of Bear Street and SR 28. The parcel is only 25 feet in width and 122 feet in depth (3,050 square feet). The two-story building has approximately 5,800 square feet of floor area but only six on-site parking spaces, and development effectively covers 100 percent of the parcel. A reasonable possible re-use of this parcel would be to keep the existing footprint, but convert the ground floor to restaurant with professional offices above. At the County Code parking rates, this would require 35 parking spaces – or roughly 10,500 square feet of parking. The size of this lot would effectively preclude the ramps needed for underground on-site parking, requiring most if not all of the additional parking to be provided off-site.

- The Tahoe City Lumber Company is located on a parcel in the center of the Tahoe City commercial area. It sits on an irregular shaped lot roughly 95 feet in width, with a total land area of approximately 12,630 square feet and a single-story building of roughly 7,900 square feet. At present, the site provides on-site parking for 11 parking spaces (as well as some outdoor materials storage). One option for re-development would be for the existing building footprint to be used for retail space, with a second story of affordable housing units. The existing 11 spaces could be used for the residential units, while the retail use would require an additional 32 parking spaces that could not be provided on-site.

As both of these examples indicate, redevelopment of existing developed properties would require substantial amounts of parking to be provided off-site – even if the total floor area of existing building were not increased.

The professional literature yields eight individual criteria for considering whether an in-lieu fee program is appropriate:

1. *Does the commercial area have a substantial number of small or irregular-shaped parcels that make development with on-site parking difficult?* This is definitely true for Kings Beach, which includes many very small commercial properties (many parcels only 50 feet in width, and several only 25 feet in width) that makes it very difficult to assemble adequate land for commercial redevelopment. While true for some portions of the Tahoe City commercial area (largely north of SR 28 and west of Grove Street) other area consist of relatively large parcels with less physical development constraints.

2. *Is there sufficient development demand to reasonably ensure that there will be multiple participants in an in-lieu fee program, providing significant fees in a timely manner?* While this is a matter of conjecture (and impacted by external factors such as the national economy), the recent upturn in interest in development projects indicates that this is the case in both community core areas, particularly if one or more larger project is developed to give the improvement funds a good initial balance.

3. *Are there feasible opportunities for development of new public parking facilities within a reasonable walk distance of parcels that may take advantage of the in-lieu program?* As discussed below, this is the case in both commercial core areas.

4. *Could the commercial district benefit from an improved window-shopping pedestrian environment?* Providing such a "small town" streetscape is a key strategy for both commercial areas.

5. *Are there active efforts to expand public parking that could be aided by an in-lieu fee program?* This is the case in both areas.

6. *Does the public agency have the staff capacity to administer the program?* Certainly, Placer County has these capacities, and has shown that addressing parking issues in the Tahoe commercial areas is an important priority. An in-lieu fee program could also generate funds to administer the program.

7. *Are there other funding sources available to augment the in-lieu fee funding to ensure that parking can be provided in a timely manner?* Yes, funding is available through TOT funds, as well as other potential funding sources.

8. *Can a program make a substantial difference in making redevelopment projects feasible?* This appears to be the case in both commercial districts, due to the existing physical and TRPA regulatory limitations.

Considering all of these guidelines as a whole, it can be concluded that the Kings Beach commercial core area fully meets all guidelines for a successful in-lieu parking fee / PID program. A program in Tahoe City would only be successful if there is a sufficient flow of projects that participate in the program, which is doubtful.

User Revenues

The imposition of charges for public parking (including parking in rights-of-way) is common in larger urban areas, as well as in some mountain resort communities (including Aspen, Park City, Vail and Truckee). Parking fees can generate significant annual revenues, which may be used for the provision of new parking facilities as well as operations/maintenance of facilities. Improvements in "pay and display" technologies (such as is found in downtown Truckee) can

reduce the visual clutter of an on-street paid parking program from that generated by individual parking meters. Further advancements in technology are becoming more widely implemented, such as sensors that indicate the presence of a vehicle in parking spaces which can be used to direct drivers to available spaces.

There are, however, substantial disadvantages to paid parking programs:

- The operational/management costs are significant. Staff is needed to conduct a range of activities, including enforcement, collecting and counting revenues, maintaining equipment, preparing financial reports, managing protests of parking fines, and holding meetings. Office space, office equipment and vehicles are needed to support the staff. In addition, ongoing costs are required for utilities and credit card transaction fees. A reasonable estimate of ongoing costs for a paid parking program in the Tahoe City and Kings Beach core areas, implemented in the summer and winter seasons only, would be $210,000 annually.

- Capital costs are also substantial. Pay-and-display meters would need to be provided within a reasonable (150-200 foot) walk of all public spaces, and avoid the need to cross the state highways. This equates to a total of approximately 30 kiosks in both Tahoe City and Kings Beach. At a typical cost of $10,000 per unit, and considering installation and signage costs, approximately $800,000 would be required to implement a paid parking program in Tahoe City and Kings Beach. While there are vendors that could potentially provide these up-front costs, they would require long-term contracts and control over the parking program, which can create friction between the vendor, local staff, and the public.

- There can be significant issues with shifts in parking demand out of the paid parking area and into nearby residential areas, as drivers (particularly employees) strive to avoid the parking fees. While this effect can be addressed through establishment of residential parking permit areas, this in turn adds to enforcement and management costs, and can be a substantial hassle for residents. In addition, paid public parking can increase inappropriate use of private parking lots.

- Paid parking can be seen as a detriment to business, particularly in a retail/dining center that is dependent on a high turnover of customers. It can also be seen as making a community "unfriendly" to visitors. Public acceptance of paid parking typically only occurs when it is seen as necessary to solve a serious and ongoing parking shortage problem. A nearby example of resistance to paid parking occurred in South Lake Tahoe, where a ballot measure in Spring of 2014 was successful in the elimination of paid parking at three popular beach areas (though the onstreet paid parking in the Stateline area remains).

Parking Regulation

California Statutes provide broad powers to local jurisdictions to enact regulations regarding the use of public rights-of-way for public parking. In particular, the *California Vehicle Code* Section 22506 states that "*Local authorities may by ordinance or resolution prohibit or restrict the stopping, standing, or parking of vehicles on a state highway, in their respective jurisdictions, if the ordinance or resolution is first submitted to and approved in writing by the Department of Transportation, except that where maintenance of any state highway is delegated by the Department of Transportation to a city, the department may also delegate to the city the powers conferred on the department.*"

Chapter 7
Conclusions and Recommendations

The conclusions and recommendations of this study are summarized as follows. Planning assumptions that were used in development of these recommendations are as follows:

- It is in the public interest to minimize parking wherever possible, in order to (1) minimize capital and maintenance costs, (2) reduce impervious coverage and other environmental effects, (3) encourage non-auto transit modes, and (4) assist in the development of compact walk-able community land use patterns. Employing parking management strategies rather than construction of new parking spaces (where feasible) helps to minimize parking.

- On the other hand, the private automobile will realistically remain the predominant transportation mode in the region (particularly for longer trips) for the foreseeable future. Unduly reducing parking supply below the level needed to adequately accommodate parking demand only results in conflict between commercial property owners or "spillover" parking in residential areas adjacent to key parking generators.

- In light of the very limited days and hours of peak parking demand in the Tahoe Region, it is appropriate that parking be effectively 100 percent utilized at the busiest of times.

These recommendations have been developed to balance these factors to best meet the overall parking/mobility needs of the region.

Code Requirements

Recommended revisions to parking requirements were developed based upon the review of peer communities and the review of national data (as presented in Chapter 4) and the analysis of observed parking demand presented in Chapter 5. These recommendations also reflect that it is preferable to focus code requirements on those quantities that can be determined as part of the project review process (such as floor area or number of units) and to avoid quantities (such as number of part-time employees) that are a matter of conjecture or of future management decisions.

The recommended rates, (based on the TRPA land use classification system) are presented in Table 19. Note that this new classification system includes land use types for which there are either no available parking demand data or for which demand varies depending on site-specific conditions. These unique land uses are indicated in the table as those that will be determined by use permit to define an appropriate parking requirement.

A review of the existing and proposed code requirement indicates an **increase** in recommended parking rates for the following land use types:

- Auto repair/service or service station
- Recreation Center

TABLE 19: Recommended Parking Demand Rates (1/2)

Use	Required Number of Parking Spaces	Discount In Core Area	Notes
Agricultural, Resource and Open Space Uses			
Nursery	1 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area		
Manufacturing and Processing Uses			
Collection Stations	2 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area		
Small-Scale Manufacturing	1.1 per 1,000 sq.ft.		Consistent with ITE
Recreation, Education, and Public Assembly Uses			
Amusement and Recreation Services	Determined by Use Permit		
Beach Recreation	Determined by Use Permit		
Boat Launch Facilities	1 per peak employee and .75 car/trailer spot per anticipated daily launch user		
Churches/Religious Assembly	0.25 per permitted capacity		Consistent with ULI. Basing rate on capacity reflects religions that do not use fixed seating.
Cross Country Skiing Courses	1 per every 3 day users		
Cultural Facilities	4.2 per 1,000 sq.ft.	✓	Consistent with ITE for Library land use
Day Use Areas	1 per every 3 day users		
Developed Campgrounds	1 per peak employee and 1.1 per campsite		
Dispersed Outdoor Recreation	1 per every 3 day users		
Golf Course	9.8 per hole		Consistent with ITE
Government Offices	4 per 1,000 sq.ft.		
Local Assembly and Entertainment	6.66 per 1,000 sq.ft. or 1 space per 3 seats, (whichever is higher)	✓	
Local Post Offices	6 per 1,000 sq.ft.	✓	
Marinas	1 per full-time employee and .33 per mooring or slip		No change. While lower than ITE, reflects lower utilization rates than in marinas closer to permanent residences.
Membership Organizations	3.33 per 1,000 sq.ft.		
Outdoor Amusements	1 space per every 3 day users		
Outdoor Recreation Concession	Determined by Use Permit		
Participant Sports (facilities)	1 per peak employee and 2 per 1,000 sq.ft.		
Private Owned Assembly and Entertainment	6.66 per 1,000 sq.ft. or 1 space per 3 seats, whichever is greater	✓	
Publicly Owned Assembly and Entertainment	6.66 per 1,000 sq.ft. or 1 space per 3 seats, whichever is greater	✓	
Recreation Center	3.2 per 1,000 sq.ft.	✓	Consistent with ITE
Recreational Vehicle Park	1 per peak employee and 1.1 per campsite		Eliminates conjecture regarding type of employee at project review
Riding and Hiking Trails	Determined by Use Permit		
Rural Sports	1 space per every 3 day users		
Schools- Business and Vocational	13.33 per 1,000 sq.ft. and 1 per employee		
Schools- College	0.4 total student population (students, faculty, staff)		Consistent with ITE
Schools- Kindergarten thru Secondary	0.25 per students (K – Grade 8) and 0.3 per student (Grade 9 – 12)		Consistent with ULI. Current non-classroom factor difficult to apply.
Schools- Pre-Schools	0.3 per child capacity		
Skiing Facilities	1 space per every 3 day users and 0.5 per peak employee		
Snowmobile Courses	1 space per every 3 day users and .5 per peak employee		
Social Service Organizations	3 per 1,000 sq.ft.		
Sport Assembly	0.33 per seat		
Undeveloped Campgrounds	None		
Visitor Information Center	6 per 1,000 sq.ft.		
Residential Uses			
Employee Housing	0.6 per bed and 1 per live-in employee		
Group Facilities	0.33 per 1,000 sq.ft.		Easier to administer if tied to facility area. Reflects typical recreational vehicle occupancy in area.
Mobile home dwelling	2.17 per unit		
Multi-family dwelling	1 per bedroom for first two bedrooms and .5 per additional bedroom		# Beds is conjecture at project review. Current rate results in more spaces for larger units than peers or other data. Visitors can typically be accommodated in parking not used by empty 2nd home units.
Multi-person dwelling	0.6 per resident and 1 per peak employee		
Nursing and Personal Care	0.45 per resident and 1 per peak employee		
Residential Care	1 per 3 beds and 1 per peak employee		
Single-Family Dwelling	2 per unit		

Source: ITE -- Parking Generation, 4th Edition, Insitute of Transportation Engineers, 2010. Source: ULI -- Dimensions of Parking, 5th Edition, Urban Land Institute, 2010.

TABLE 19: Recommended Parking Demand Rates (2/2)

Use	Required Number of Parking Spaces	Discount In Core Area	Notes
Retail Trade			
Auto, Mobile Home, and Vehicle Dealers	1 per peak employee and 2 per 1,000 sq.ft. of sales area		
Building Materials and Hardware	3 per 1,000 sq.ft. including outdoor sales area	✓	Consistent with ULI, and with observed parking demand at stores in Kings Beach and Tahoe City
Eating and Drinking Places	10 per 1,000 sq.ft. or .25 per customer or seat (whichever is higher)	✓	
Food and Beverage Retail Sales	5 per 1,000 sq.ft.	✓	Consistent with ITE and observed North Tahoe demand.
Furniture, Home Furnishings and Equipment	2 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area	✓	No change. Existing rate is higher than ITE, but typical home furnishing (boutique) store in North Tahoe differs from typical furniture store nationwide., and probably has higher parking demand rate.
General Merchandise Stores	3.33 per 1,000 sq.ft.	✓	
Mail Order and Vending	2 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area		
Outdoor Retail Sales	1 per employee and 2 per 1,000 sq.ft. of storage area	✓	
Service Uses			
Animal Husbandry	4 per 1,000 sq.ft. of outdoor kennel		
Auto Repair and Service	3.33 per 1,000 sq.ft. of retail/office area and 4 per service bay		Counts in both Kings Beach and Tahoe City indicate more vehicles per bay than existing code.
Business Support Services	3.33 per 1,000 sq.ft.		
Cemeteries	1 per peak employee		
Contract Construction Services	3.33 per 1,000 sq.ft.		
Day Care Centers/Pre-Schools	1 per peak employee and .2 per student		Consistent with ITE and ULI
Financial Services	4 per 1,000 sq.ft.		Consistent with ITE
Health Care Services	5 per 1,000 sq.ft.		Consistent with ITE and slightly higher than ULI
Hospitals	7.35 per bed		Consistent with ITE
Laundries and Dry Cleaning Plants	2 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area		
Local Public Health and Safety Facilities	1 per peak employee and 1 per 1,000 sq.ft.		
Personal Services	4 per 1,000 sq.ft.	✓	
Pipelines and Power Transmission	none		
Professional Offices	3.5 per 1,000 sq.ft. of		Consistent with ITE and median of peers, slightly lower than ULI
Public Safety Facilities	1 per peak employee and 1 per 1,000 sq.ft.		
Public Utility Centers	1 per employee		
Regional Public Health and Safety Facilities	1 per peak employee and 1 per 1,000 sq.ft.		
Repair Services	2 per 1,000 sq.ft. of non-storage area and 1 per 1,000 sq.ft. of storage area	✓	
Service Stations	3.33 per 1,000 sq.ft. retail/office area and 4 per service bay		
Storage	1 per 1,000 sq.ft. storage area		
Threshold-Related Research Facilities	3.33 per 1,000 sq.ft.		
Warehousing	.8 per 1,000 sq.ft.		Consistent with ITE
Transient Lodging			
Bed and Breakfast Facility	1 per bedroom and 1 per peak employee		
Hotel, Motel and Other Guest Facility	1.25 per unit for first bedroom and .25 per additional bedroom and 4 per 1000 sq.ft. of meeting/display area AND 2.5 per commercial/retail area over 1000 sq.ft.		Number of employees is conjecture at project review. Lower incremental parking demand for additional rooms in each unit is consistent with other studies. Still yields parking rate higher than peers, reflecting higher auto access mode share from outside the region. Small retail excluded as it does not generate significant external customers.
Timeshare (hotel/motel design)	1.25 per unit for first bedrooms and .25 per additional bedroom in unit		
Timeshare (residential design)	1.25 per unit for first bedrooms and .25 per additional bedroom in unit		
Transportation and Communication			
Airfields, Landing Strips, and Heliports	Determined by Use Permit		
Broadcasting Studios	3.33 per 1,000 sq.ft.		
Transit Stations and Terminals	Determined by Use Permit		
Transmission and Receiving Facilities	none		
Transportation Routes	none		
Vehicle Storage and Parking	2 per 1,000 sq.ft. non-storage area and 1 per 1,000 sq.ft. of storage area		

Source: ITE – Parking Generation, 4th Edition, Insitute of Transportation Engineers, 2010. Source: ULI -- Dimensions of Parking, 5th Edition, Urban Land Institute, 2010.

A **decrease** in parking rates is recommended for the following land use types:

- Multiple Family Dwelling Units of Two or More Bedrooms
- Residential Care
- Theater
- Auditoriums/Meeting Space With Fixed Seating
- Financial Services
- Health Care Services
- Professional Offices
- Food and Beverage Retail Sales
- General Merchandise – Convenience Store
- Small Scale Manufacturing
- Warehousing / Mini-Warehousing
- Colleges

For all other land use types, either there is no change in rate, or the change depends on the details of a specific site (such as number of employees vs. floor area).

Other Code Recommendations

Other recommendations regarding changes in the parking code regulations consist of the following:

- Provide a 5 percent reduction in parking requirements for commercial land uses (as identified in Table 18) in the Tahoe City and Kings Beach commercial core areas. This reflects the higher non-auto travel mode use in these areas (particularly in the future). This reduction should not be allowed for residential or lodging uses, as regional access remains largely depending on the private automobile. In addition, this reduction should not be allowed for public service or regional recreation uses, as they draw travelers from a wider region.

- Maintain the current 10 percent value over parking minimum as a parking maximum. Realistically, it is not possible to forecast parking demand in every case to the level assumed when the parking maximum is set to the parking minimum. This infers that there is only one exact parking count that will be achieved, which is not realistic given the inherent variation in parking demand. The maximum value assures that excessive parking leading to excess auto use is not provided.

- For restaurants, allow areas used for snow storage in winter to be striped and counted towards parking required for summertime unenclosed patio dining areas (outdoor seating).

- Snow storage requirements should remain a consideration of plan review on a case-by-case basis

- For special event parking (such as concerts, auditorium use and farmers markets) the requirement for maximum walk distance to off-site parking should be reviewed on a case-by-case basis, if proposed to exceed 500'.

In-Lieu Parking Fee Program

An in-lieu parking fee program should be established for both the Kings Beach and Tahoe City commercial core areas. This program has the following benefits:

- Provides a better pedestrian/shopping environment, by avoiding the need for streetscapes to be interrupted by on-site parking and associated curb cuts. A much better "window shopping" experience can result.
- Enhances the potential for revitalization of older commercial properties by providing another option to meet parking requirements beyond on-site parking.
- Increases the effective use of parking, by allowing shared parking among land uses that have peak parking needs at different times of day or seasons.
- Can generate funds to help cover the shared costs of parking facility construction.
- Increases the ease of understandability and convenience of parking for visitors.

Total parking fees should be based upon recent local costs of new parking spaces. Table 20 presents recent costs for the various smaller public lots recently constructed or planned for construction in the Kings Beach area. As shown, these 151 new public parking spaces are expected to cost a total of $5,587,000 for land, design, permitting and construction. This equates to $37,000 per space, of which $22,600 is for land and the remaining $14,400 is for development and construction of the lots.

TABLE 20: Recent Public Parking Lot Costs in Kings Beach

			Costs								
Parking Lot	Currently Constructed?	Number of Stalls	Land Purchase	Est. Design	Est. Permitting	Est. Construction	Subtotal: Design/ Permitting / Construction	Total	Design/ Permitting / Construction Cost per Space	Land Cost per Space	Total Cost per Space
Rainbow Lot	No	18	$510,000	$52,000	$8,000	$350,000	$410,000	$920,000	$22,800	$28,300	$51,100
Ferrari Lot	No	43	$900,000	$52,000	$8,000	$350,000	$410,000	$1,310,000	$9,500	$20,900	$30,400
Salmon Lot	Yes	22	$495,000	$52,000	$8,000	$350,000	$410,000	$905,000	$18,600	$22,500	$41,100
McGuire Lot	No	28	$750,000	$52,000	$8,000	$273,000	$333,000	$1,083,000	$11,900	$26,800	$38,700
Brook Lot	Yes	20	$285,000	$52,000	$8,000	$217,000	$277,000	$562,000	$13,900	$14,300	$28,200
Minnow lot	Yes	20	$480,000	$52,000	$8,000	$267,000	$327,000	$807,000	$16,400	$24,000	$40,400
TOTAL		151	$3,420,000	$312,000	$48,000	$1,807,000	$2,167,000	$5,587,000	$14,400	$22,600	$37,000

Source: Placer County Public Works, January 2015

This $37,000 cost per space could potentially be reduced for individual private property owners through provision of public funds. In addition, a private landowner that provides land for new public parking spaces could receive a credit equal to the value of the land that could be used to offset in-lieu fees for offsite parking needs. It is further recommended that a flat per-space in-lieu fee be applied, rather than the graduated fee schedule depending on the number of spaces needed that some of the other jurisdictions have implemented. A flat fee has the distinct advantage of providing greater equity among program participants.

Other recommended elements of the in-lieu parking fee program are as follows:

- A separate fund should be established in each commercial core to hold funds (as well as interest generated by these funds) that is reserved for future provision of parking accessible to the public, or other programs to reduce parking demand.

- The program should be limited to non-residential land uses only.

- Payment of fees is typically due prior to issuance of a building permit or a certificate of occupancy if a building permit is not required.

- No specific maximum on the proportion of parking provided through the in-lieu program should be set, as there are some parcels that could potentially be developed with no on-site parking. On the other hand, participation in the program should not be a requirement (as it is in some other jurisdictions).

- It would be appropriate to limit the number of in-lieu spaces that could be provided as part of any one project application. This would ensure that larger projects (such as a new major lodging property) provide at least a portion of parking spaces on-site, and also ensure that an undue level of financial resources not be expended for any one project. A reasonable recommendation would be that in-lieu fee spaces can only be used for up to 50 percent of the number of required parking spaces over the first 50. Alternatively, the ability to pay in-lieu fees can be provided at the discretion of County staff, in which case a specific limit would not need to be identified in the enabling ordinance.

- Typically, establishing an in-lieu fee program requires nothing more than adoption of a County ordinance.

For the in-lieu fee program to succeed, it is important that variances reducing the total required parking for individual projects (either on-site or through payment of the in-lieu fee) be minimized. The in-lieu fee program effectively provides a mechanism to address specific site issues that preclude adequate on-site parking supply. Excessively allowing landowners to avoid paying in-lieu fees could endanger the success of the overall public parking in-lieu program.

Other Parking Management Strategies

The current ability of landowners to develop parking management plans and to enter into agreements for joint use of private parking facilities should be continued and encouraged.

Consideration should be given to providing ongoing funds for compensation to private parking lot owners for time-dependent public parking use. As evidenced by the parking counts documented above, current parking issues are not so much a shortfall of available overall parking as they are a shortfall of parking available for public use. A good example is the lack of public parking during the middle of a busy summer day (driven in large part by beach parking) when lodging properties have relatively available spaces. Counts at lodging properties could identify a minimum number of spaces that are always available between, for example, 10 AM and 5 PM. In exchange for ongoing annual payments, this number of spaces could be signed for public parking during this period. Given the high cost of providing new public parking spaces (as discussed above), this could yield a net savings in public funds needed to expand public

parking capacity. Funding could come from a variety of sources, such as business associations, parking management districts, and beach/special event managers.

This plan should be modified over time to adapt to changes in mobility patterns, development, and overall parking needs. Peak summer season parking utilization counts in the commercial core areas (such as on a 2-year or 4-year schedule) would allow management strategies to better track with changes in parking needs.

Recommended Design Requirements

- Maintain the current standard parking space width of 9', the standard parking space length of 20' and the parallel parking space length of 22'.

- The current 90 degree aisle width of 25 feet should be reduced to 24 feet. The aisle width for a 60 degree parking bay (16') and the current 14' aisle width for 45 degree parking bays should remain unchanged.

- Continue to allow up to 20 percent of spaces to be compact spaces, but for lots of at least 20 spaces. While mountain resort areas typically have a high proportion of larger vehicles, the North Tahoe area's proximity to the Bay Area (with its high proportion of smaller vehicles), the trend to a higher proportion of smaller vehicles in California, and the need to minimize impervious surface in the Tahoe Basin indicates that compact spaces are an appropriate strategy for the region. Compact space size should be maintained at 8' in width and 16' in length.

- Wheel stops create a tripping hazard, can impede disabled access, can block drainage, can lead to buildup of litter, can impede snow removal and can increase maintenance costs. They should only be used in locations where the bumper overhang of the vehicle can intrude into a pedestrian area so as to leave insufficient width, or where a significant potential exists for damage to buildings or landscaping. This is a change from current standards.

- Interior landscaping is important in improving the visual quality of larger parking areas as well as providing opportunities for rain gardens and other strategies to reduce runoff. The provision of "curbless" landscaping islands is preferred (such as is currently seen at Save Mart in Tahoe City, Safeway in Kings Beach and the North Tahoe High School.

- Bicycle parking – require 10 percent of auto spaces, with a minimum of three, for all new construction or addition to commercial, public, industrial uses as well as multifamily dwelling units. If exceeding 10 bicycle spaces, this requirement may be reduced by the Planning Services Division.

- Stacked parking should continue to be allowed.

- Parallel onstreet parking (limited as necessary for snow removal) should be encouraged in activity centers as a means of improving the sidewalk environment, providing additional public parking and enhancing street life. Angled parking should be discouraged along arterial and collector streets.

- A minimum driveway length of 40 feet should be provided between the edge of pavement of the adjacent street and the first parking space or cross aisle in the parking lot where the total

two-way traffic volume on the adjacent street exceeds 5,000 vehicles per day and the number of spaces served in the lot exceeds 10. This limits the requirement to those locations where there is a reasonable possibility of an inbound traffic queue formed by a parking maneuver in the first space that could noticeably impede traffic or cycling on the adjacent roadway. At other commercial or public lots, the minimum driveway length should be 20 feet. This is a change from the current policy of 40 feet in all locations.

Additional Public Parking

Existing Parking Shortages

The count and utilization data presented in Chapter 5 provides a good background on existing parking conditions by area, by type of parking, and by time of day, which can be used to estimate existing parking shortfalls. Typical parking planning guidelines call for a maximum observed utilization of 85 to 95 percent of all spaces (in order to avoid excessive driving around in search of the last few available spaces). In light of the limited periods of peak demand (as evidenced in Tables 3 and 6) as well as the need to minimize impervious paved surfaces in the Tahoe Region, the factor of 100 percent is applied. The observed parking demand was compared with the parking supply for each study district and for public lots in each area, yielding the existing parking shortfalls as follows:

Kings Beach	
District 1 – Safeway / Brockway	13
District 2 – North Tahoe Beach	8
District 4 – 267 to Secline South of 28	8
District 10 – Bear to Coon South of 28	8
District 12 – Coon to Fox South of 28	16
District 13 – Fox to Chipmunk North of 28	2
Total	55
Tahoe City	
District 2 – 64 Acres / S. of Truckee River	10
District 7 – North of 28, Grove Street and East	0
Total	10

Note that the areas of observed shortages are not necessarily the areas where additional parking should be supplied. Some areas may be impacted by overflow parking from other areas (such as District 13 in Kings Beach and District 7 in Tahoe City). In areas like the 64 Acres, it could be argued that expanding parking would simply expand demand. In addition, the high observed parking utilization in the vicinity of North Tahoe Beach and Secline Beach may in part be a temporary effect of the construction (and associated loss of parking) at Kings Beach State Recreation Area; parking counts in the western portion of Kings Beach in a future summer would be warranted before investing in new public parking in the area. As a shift back towards the Kings Beach State Recreation Area would simply shift the overall shortfall to another area with shortfall, however, the total shortfall of 55 spaces remains valid.

Future Public Parking Demand Scenario

The need for public parking could also increase in the future, due to developments that address at least a portion of the necessary parking supply off of the individual development parcel (particularly if an in lieu fee program is instituted). The actual number of public parking spaces

will depend on several factors that are difficult to forecast, including the actual level and type of development in each of the commercial core areas (which is a function of economics as well as planning regulations) as well as the proportion of parking demand that developers choose to provide on-site versus relying on an in lieu fee program. In discussions with Placer County Planning staff, the reasonable projection presented in Table 21 was developed. This was conducted in the following steps:

TABLE 21: Evaluation of Future Public Parking Demand Scenario

Placer Co. Commercial Floor Area Remaining From the 1987 Regional Plan	72,609
Additional CFA Available from 2012 Regional Plan After All Local Jurisdictions Exhaust Remaining CFA	200,000
Assume that Placer County uses all remaining 1987 RP CFA	
Assume that Region uses remaining 1987 CFA, and that Additional CFA is Released	
Assume that Placer County uses 20 percent of the new 200,000 Square Feet of CFA	
Total CFA used in Placer County Over Next 20 Years	112,609
Assume that 30 percent would be located in Kings Beach, 30 percent in Tahoe City, 40 percent elsewhere	
Assume that In Kings Beach and Tahoe City, 50 percent of CFA is retail space, 40 percent is restaurant (equal mix of quality/bar and fast food), 10 percent is office	
Assume new 'boutique hotels' totalling 225 rooms in Tahoe City and 150 in Kings Beach	

	Retail KSF	Office KSF	Restaurant KSF	Lodging Rooms	Total
Kings Beach					
Future Development	16.9	3.4	13.5	150	
Parking Rate	3.33	3.5	10	1.25	
Shared Parking Factor (% of Peak)	100%	6%	65%	70%	
Total Parking Required	56	1	88	131	276
Tahoe City					
Future Development	16.9	3.4	13.5	225	
Parking Rate	3.33	3.50	10.00	1.25	
Shared Parking Factor (% of Peak)	100%	6%	65%	70%	
Total Parking Required	56	1	88	197	342

1. A total of 72,609 square feet of Commercial Floor Area (CFA) development capacity is available, remaining from the original allocations in the 1987 Regional Plan.

2. If all local jurisdictions exhaust their remaining CFA, under the newly adopted Regional Plan an additional 200,000 CFA could be released. Assuming that Placer County development uses 20 percent of this, total commercial development would be 112,609 SF.

3. A reasonable assumption is that 30 percent of this total would occur in Kings Beach (33,800 SF), 30 percent in Tahoe City (33,800 SF), and 40 percent in the remainder of the Placer Tahoe Basin.

4. In the two commercial cores, a reasonable assumption is that 50 percent of the new commercial development would be retail space, 40 percent restaurant space, and the remaining 10 percent office.

5. It is assumed that new hotels are constructed in Tahoe City and in Kings Beach, totally 225 rooms and 150 rooms, respectively.

6. The recommended parking demand rate for each land use type was applied. In addition a factor was applied to reflect the time-of-day and day-of-week parking demand at the time of peak overall public parking demand (2 PM on a Saturday). This results in the total parking demand for future development.

As shown, this results in 276 additional parking spaces required in Kings Beach, and 342 in Tahoe City. The proportion of this overall increase in parking need that can be accommodated within the individual development lots will depend on site specifics.

It should be stressed that this is only one potential scenario for future development in the commercial core areas. At present, the update of the Placer County Area Plan as well as a number of private development projects results in a high degree of uncertainty regarding actual future development and associated need for offsite parking. As plans firm up, the need for public parking should be updated.

Locating Additional Public Parking

There are two general public parking strategies that could be considered for the North Tahoe commercial centers: intercept parking, and integrated parking. Under intercept parking, large public parking facilities are constructed at the gateways to the community, and sidewalks or frequent public shuttles are relied on to make the connection between the intercept locations and the various trip generators. For instance, in Tahoe City this could consist of expansion of public parking in the 64 Acre area (or Caltrans yard area) on the southwest side and across from the State Recreation Area on the northeast side. Experience, however, indicates that this approach does not function well in all but the most restrictive or intense activity centers. As an example, the City of Aspen attempted an intercept program using a new 300-space parking lot at the "downvalley" entrance to town, served by a new 15-minute-frequency transit route. Only 20 to 30 drivers per day, however, chose to use the service, with the remainder finding more convenient parking within a closer walking distance, such as in residential neighborhoods. The poor ridership generated by the Tahoe City Trolley (before it was discontinued) is also evidence of drivers unwillingness to use intercept parking. As this strategy effectively asks a driver who is nearing their destination to instead park and wait up to perhaps 15 minutes for a transit vehicle, it is not surprising that most drivers choose instead to park as close as possible to their destination (even if it requires parking in a private lot or neighborhood) unless the intercept program is accompanied by parking restrictions (or paid parking at a significant rate).

Integrated parking relies on a series of smaller public parking facilities scattered throughout the commercial area, within convenient walking distance of trip generators. These facilities may be lots (where land is relatively inexpensive), structures, or joint development facilities. This is effectively the strategy that has been implemented in recent years in Tahoe City as well as in Kings Beach. Other examples in the region can be found in Petaluma, Los Altos, and Monterey. This approach has the advantages of enhancing convenience to customers by placing parking within convenient walk distance of destinations, avoiding the need for motorists new to the area (such as tourists) to either figure out their parking strategy in advance or backtrack to the intercept facilities, reducing overflow parking issues in neighborhood or private parking areas, and avoiding the need for ongoing funding of shuttle services. This integrated strategy is recommended for the North Tahoe commercial centers.

Beyond the total spaces needed, there are many factors that must be considered when identifying the optimal location or locations for additional public parking:

- Availability of land, and of willing sellers or partners.
- Visibility and accessibility to motorists (particularly important in a resort community)
- Potential for joint development (particularly where other development can help screen parking behind other uses)
- Cost of land, and cost of construction (lot vs. above-ground structure vs. below-ground structure)
- Proximity to developments choosing to use the in lieu parking program.
- Pedestrian travel routes, as well as the interaction between motorists and pedestrians crossing the state highways.
- Overall consistency with community land use, mobility and urban design plans.

By commercial core area, the following are findings regarding parking options:

Kings Beach

- The greatest need for additional public parking (both at present and in the future) is in the three key blocks between Deer Street and Fox Street. While the beach is a strong generator of parking demand, the commercial developments (largely on the north side of SR 28) also generate need for off-site parking, which could well expand as development occurs.
- At least in the summer of 2014, there was a strong need for additional public parking in the North Tahoe Beach / Secline Beach area. This may have, to a degree, been a result of limited access/parking to the KBSRA beach due to construction. Assuming that counts in future years confirm this use pattern, additional public parking serving this western end of the commercial core area would be warranted.
- Additional public parking on the block between Secline Street and Deer Street, as well as in the area east of Fox Street, will largely be a function of potential future development.

There are multiple potential opportunities for additional public parking in the Kings Beach area, including the following:

- The old redevelopment site on the south side of SR 28 opposite Caliente.
- The parcels previously considered under the "Town Center" proposal, including the old KFC site on the north side of SR 28 west of Fox Street.
- The area to the north of Rite-Aid.
- Joint redevelopment of one or more of the older lodging properties west of Deer Street.

- Improvements (including parking improvements) to the Secline Beach area, including potential use of the existing Beacon gas station site.

Tahoe City

- While overall there are always spaces available in the Tahoe City commercial core area, available spaces at peak times are limited to private lots (which typically are limited to customer use only). Excluding the lots in the 64 Acres area, there are only 355 public lot parking spaces in Tahoe City (along with 273 spaces along public roads). Public lots fill to capacity at peak times, both in the 64 Acres area as well as along SR 28. It is worth noting that the 59 spaces in the lower Tahoe Lake School lot are considered in the public lot supply for purposes of this study. It is also worth noting that, though its use is limited in off-seasons, utilization of the public Jackpine Lot is high throughout the week in the summer.

- Public parking is in particularly short supply in the core area between roughly Cobblestone on the west and Jackpine Street on the east.

- Even with the addition of 131 parking spaces at the Tahoe City Transit Center, a parking deficit still occurs in the 64-Acre area on peak summer days.

Potential opportunities for additional public parking in the Tahoe City area, include the following:

- Development of the lower TCPUD lot into a public lot (specifically for trail and river access).

- The vicinity of the Bechdolt Building and Tahoe City Golf Course access road, potentially as part of renovation/reconstruction project.

- Provision of a modest amount of public parking on the old Fire Station site, perhaps beneath a public plaza deck.

- Extension of the existing Grove Street lot southwestward to connect with Cobblestone Center parking. This could also have some modest benefits to circulation.

- The private vacant lot on the southwest corner of Jackpine Street and Tahoe Street.

- Joint development that includes new public parking in the Lighthouse Center area.

APPENDIX A
DETAILED PARKING COUNT TABLES

TABLE A-1: Kings Beach Detailed Parking Counts

Saturday, July 19, 2014

Map Zone	Count Zone #	Area Name	Capacity	Hour Beginning 10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Peak hour	Maximum Utilization
1	101	Safeway	198	181	197	196	197	182	186	173	177	187	11:00 AM	99%
1	103	Brockway Golf Course	72	45	49	47	46	44	31	31	34	41	11:00 AM	68%
2	102	North Tahoe Beach	37	45	45	41	40	43	42	37	22	25	10:00 AM	122%
3	104	Sierra Country Tires	22	16	17	14	14	16	15	15	13	13	11:00 AM	77%
3	J	SR 28 - N side - Secline to SR 267	10	3	9	8	12	12	8	6	5	5	1:00 PM	120%
4	106	TransAm Gas Station	6	1	3	4	2	2	2	2	2	2	12:00 PM	67%
4	107	South Secline Street - all	15	11	17	25	21	20	19	20	10	6	12:00 PM	167%
5	1	Secline St -- Rainbow to Golden	2	0	0	1	0	2	16	8	4	3	3:00 PM	800%
5	2	Rainbow Ave -- Secline to Deer	35	2	6	19	23	27	24	9	8	5	2:00 PM	77%
5	3	Deer St -- Rainbow to Golden	8	3	0	0	0	1	0	0	0	0	10:00 AM	38%
5	4	Deer St -- SR 28 to Rainbow	9	10	11	9	15	11	9	9	5	6	1:00 PM	167%
5	154	Tahoe Paddle and Oar - Front, Side, Back	21	14	13	14	15	20	17	13	9	3	2:00 PM	95%
5	155	Rite Aide	22	8	8	10	8	8	8	14	10	5	4:00 PM	64%
5	155.5	Behind Rite Aide	0	1	3	10	12	8	10	8	7	5	1:00 PM	--
5	156	Snow Peak Lodge and Ann's Cottages	8	9	9	9	9	7	7	8	11	9	5:00 PM	138%
5	157	Big 7 Motel and Hiro Sushi	39	6	3	4	5	4	3	2	4	17	6:00 PM	44%
5	158	Little Bear Cottages	11	8	9	8	8	7	7	6	8	9	11:00 AM	82%
5	159	Ace Hardware (Secline side - in front of building and lot)	12	10	5	9	8	9	7	6	4	1	10:00 AM	83%
5	160	Secline W side (across from hardware store)	8	3	7	7	9	8	7	8	1	1	1:00 PM	113%
5	161	KB Library	8	2	4	2	5	6	6	3	1	1	2:00 PM	75%
5	162	Front (SR 28 side) of Ace Hardware	4	0	0	0	0	1	1	0	0	0	2:00 PM	25%
6	108	Brockway - to beginning of Ferrari's	8	12	15	20	23	21	24	23	17	11	3:00 PM	300%
6	109	Peluso's Area - all strip malls from Secline to motels	22	8	9	13	14	12	13	11	14	10	1:00 PM	64%
6	110	Gold Crest Motel	18	8	6	6	5	5	10	11	10	12	6:00 PM	67%
6	111	Ferrari's Crown Resort - front and back	76	52	44	48	53	54	56	56	57	58	6:00 PM	76%
6	113	Java Hut / Steamers	17	6	8	15	8	12	12	13	13	13	12:00 PM	88%
6	114	Sun N Sand Lodge	18	17	13	10	15	14	18	19	18	16	4:00 PM	106%
6	G	SR 28 - S side - Secline to and including Falcon Lodge	7	2	3	3	5	4	5	3	4	5	1:00 PM	71%
7	5	Trout Ave -- Deer to Bear	26	9	14	18	24	24	20	19	20	15	1:00 PM	92%
7	6	Rainbow Ave -- Deer to Bear	14	3	8	14	28	32	16	17	8	9	2:00 PM	229%
7	7	Bear St -- Rainbow to Golden	8	1	1	1	3	6	6	4	2	3	2:00 PM	75%
7	8	Bear St -- Trout to Rainbow	6	0	0	3	4	3	4	1	1	0	1:00 PM	67%
7	9	Bear St -- SR 28 to Trout	20	7	15	15	17	18	16	13	11	10	2:00 PM	90%
7	149	Tahoe 99 Cent and More (include "Jesus" lot from Bear)	17	4	4	6	5	5	5	3	3	5	12:00 PM	35%
7	150	Chevron	17	5	4	7	5	13	11	10	5	5	2:00 PM	76%
7	151	Las Panchitas (front and back)	11	2	3	3	8	8	6	4	7	9	6:00 PM	82%
7	152	Tahoe Mountain Sports (back lot)	6	1	0	0	2	4	0	0	0	0	2:00 PM	67%
7	163	Seven Pines Motel	9	3	3	3	4	3	3	4	4	4	1:00 PM	44%
7	164	Community House	10	1	1	1	1	6	5	3	2	1	2:00 PM	60%
7	F	SR 28 - N side - Panchitas to Deer	12	0	5	6	6	6	4	6	6	0	12:00 PM	50%
8	115	North Tahoe Event Center - Front and Side	8	2	2	3	1	1	1	4	5	6	6:00 PM	75%
8	116	Jason's - Front and Side	13	13	17	18	18	20	18	16	16	17	2:00 PM	154%
8	117	Jason's - Back (lake side)	21	15	16	18	19	16	19	15	18	18	1:00 PM	90%
8	118	Kings Beach State Park - main parking	76	71	70	73	71	72	74	61	61	55	3:00 PM	97%
9	10	Trout Ave -- Bear to Coon, include Sierra Sun Cottages	25	2	8	14	17	21	18	13	11	5	2:00 PM	84%
9	11	Brook Ave -- Bear to Coon	21	4	11	14	15	11	11	10	4	4	1:00 PM	71%
9	12	Coon St -- Trout to Rainbow	8					Construction					10:00 AM	0%
9	13	Coon St -- Brook to Trout	8					Construction					11:00 AM	0%
9	14	Coon St -- SR 28 to Brook	2	1	5	9	10	8	6	5	3	3	1:00 PM	500%
9	136	Seven Eleven	13	8	6	8	3	3	4	6	7	6	10:00 AM	62%
9	138	Grigg's Construction (front) Robin Nest / Well Being Skin Care	8	4	6	2	3	2	2	2	2	2	11:00 AM	75%
9	139	Grid / China Express	11	2	7	13	14	8	9	8	12	10	1:00 PM	127%
9	140	Central Market (Brook Ave side)	24	9	11	11	14	19	12	10	9	8	2:00 PM	79%
9	141	Plumas Bank	14	6	6	6	13	12	12	7	3	4	1:00 PM	93%
9	142	King Building	16	6	6	8	7	6	4	6	3	3	12:00 PM	50%
9	144	La Mexicana	8	3	4	6	2	4	2	4	5	4	12:00 PM	75%
9	146	Brook Ave Public Lot	20	19	19	20	19	18	18	15	15	10	12:00 PM	100%
9	147	Bank of the West	13	1	3	4	5	7	7	6	6	3	2:00 PM	54%
9	E	SR 28 - N side - Central Market to Bear	8	3	1	1	2	3	2	0	1	2	10:00 AM	38%
10	H	SR 28 - S side - Beach Parking entrance to Coon (roundabout)	32	10	23	38	38	40	39	25	20	19	2:00 PM	125%
11	10.5	Trout Ave -- Coon to Fox	14	0	6	11	13	14	15	14	5	5	3:00 PM	107%
11	15	Brook Ave -- Coon to Fox	37	8	13	15	19	25	14	12	4	2	2:00 PM	68%
11	16	Salmon Ave -- Coon to Fox	26	4	17	26	28	27	20	11	6	5	1:00 PM	108%
11	17	Fox St -- Salmon to Brook	13					Construction					11:00 AM	0%
11	18	Fox St -- SR 28 to Salmon, include by KFC fence	3	0	2	2	5	3	5	3	1	1	1:00 PM	167%
11	132	North Tahoe Village (Liquor Store)	21	4	11	21	17	20	15	13	14	13	12:00 PM	100%
11	133	Hospice Thrift and Tattoo Shop	24	9	16	18	17	12	8	8	4	6	12:00 PM	75%
11	134	Post Office	17	0	0	1	1	2	4	1	2	1	3:00 PM	24%
11	135	Placer County Public Health (Clinic)	12	5	5	5	5	6	7	2	1	1	3:00 PM	58%
11	C	SR 28 - N side - Fox to Coon (roundabout)	10	5	11	12	10	15	12	9	6	8	2:00 PM	150%
12	21.1	Brockway Vista Ave -- Coon St to Midpoint	17	5	10	14	18	20	21	14	8	5	3:00 PM	124%
12	120	Coon Street Boat Ramp Area - all along Coon from 28 to water	34	24	43	47	42	45	42	53	42	11	4:00 PM	156%
12	121	Kayak Shop / Enviro Rents, include Rockwood Tree Service	5	5	7	7	8	8	6	6	6	7	1:00 PM	160%
12	122	Log Cabin Café, include Sierra Shirts and Shades	11	10	14	18	14	6	5	6	3	0	12:00 PM	164%
12	123	Subway include Brockway Bakery and Tahoe Cuts Hair Salon	16	7	6	6	6	15	2	3	2	1	2:00 PM	94%
12	D	SR 28 - S side - Fox to Coon (roundabout)	7	2	8	7	10	12	11	4	2	0	2:00 PM	171%
13	19	Minnow Ave -- Fox to Chipmunk	7	1	2	5	7	8	5	2	1	0	2:00 PM	114%
13	20	Chipmunk Ave -- SR 28 to Minnow	15	5	5	8	13	14	14	16	17	22	6:00 PM	147%
13	128	Caliente	22	5	4	13	15	22	15	13	16	24	6:00 PM	109%
13	129	Car Wash	17	0	3	0	1	0	0	0	2	33	6:00 PM	194%
13	130	Minnow Ave Public Parking lot (accessible from 28 also)	22	5	12	21	20	19	18	16	15	21	12:00 PM	95%
13	A	SR 28 - N Side - Chipmunk to Fox	25	10	4	10	20	17	18	14	12	10	1:00 PM	80%
14	21.2	Brockway Vista Ave -- Midpoint to Chipmunk	25	7	14	22	27	29	31	20	12	8	3:00 PM	124%
14	21.5	Chipmunk Ave -- SR 28 to Brockway Vista	5	0	0	0	4	5	6	3	3	3	3:00 PM	120%
14	124	Char Pit area	10	3	4	6	8	11	9	7	8	8	2:00 PM	110%
14	125	Stevenson's Holiday Inn	23	3	2	6	20	21	22	23	20	13	4:00 PM	100%
14	126	Ta-Tel Lodge	13	5	4	7	5	5	6	6	7	5	12:00 PM	54%
14	127	Launderette (green building)	6	1	0	1	0	3	3	1	1	0	2:00 PM	50%
14	B	SR 28 - S Side - Chipmunk to Fox	22	16	4	14	16	15	18	13	6	9	3:00 PM	82%

TABLE A-2: Tahoe City Detailed Parking Counts

Saturday, July 12, 2014

Map Zone	Count Zone #	Area Name	Capacity	Hour Beginning 10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	Peak hour	Min	Avg	Max	Maximum Utilization
1	224	Gas Stations - both (do not counts cars parked in fueling area)	24	11	13	19	20	23	21	14	9	11	2:00 PM	9	15.7	23	96%
1	225	TCPUD - upper lot	52	7	4	4	3	6	4	4	4	5	10:00 AM	3	4.6	7	13%
1	226	TCPUD - lower lot	41	1	0	0	0	0	0	0	1	0	10:00 AM	0	0.2	1	2%
2	201	64 acres	93	47	63	105	124	140	143	130	95	64	3:00 PM	47	101.2	143	154%
2	202	Tahoe City Transit Center	131	14	13	36	87	100	109	96	62	27	3:00 PM	13	60.4	109	83%
2	203	Bridgetender	27	16	20	26	26	25	15	27	21	26	4:00 PM	15	22.4	27	100%
2	206	64 Acres beach lot (E side of SR 89, S of Bank of the West)	12	4	3	6	13	14	18	14	9	7	3:00 PM	3	9.8	18	150%
2	207	Bank of the West	40	12	35	42	45	44	42	31	31	24	1:00 PM	12	34.0	45	113%
2	208	Gatekeeper's public parking	59	23	29	33	48	50	53	45	43	50	3:00 PM	23	41.6	53	90%
2	J	SR 89, W. Side - 64 Acres turn-out to Fanny Bridge - all	0	0	0	0	1	0	0	0	0	0	1:00 PM	0	0.1	1	–
2	K	SR 89, E. Side - Fanny Bridge to 64 Acres turn-out - all	0	0	0	0	2	3	0	1	0	0	2:00 PM	0	0.7	3	–
3	209	Visitors Center, including new lot	40	20	20	23	23	25	22	23	17	15	2:00 PM	15	20.9	25	63%
3	212	Mackinaw Road - all public and commercial parking	56	36	28	29	30	29	30	28	30	31	10:00 AM	28	30.1	36	64%
3	222	Dam Café, River Grill, Gary Davis lots - all	82	80	88	83	83	77	78	68	67	57	11:00 AM	57	75.7	88	107%
3	223	Front Street Station, Rafting parking lots - all	45	39	42	50	51	55	34	31	24	15	2:00 PM	15	37.9	55	122%
4	210	Willard's Sports	15	9	11	10	10	6	9	8	4	1	11:00 AM	1	7.6	11	73%
4	211	Swigard's Hardware	18	8	13	10	8	6	9	10	7	2	11:00 AM	2	8.1	13	72%
4	220	Golf Course, Bank of America, Plumas Bank	78	39	43	34	41	37	39	35	27	15	11:00 AM	15	34.4	43	55%
4	221	SaveMart	130	85	106	91	85	89	90	88	72	52	11:00 AM	52	84.2	106	82%
5	213	SR 28 Public Parking by Commons Beach	24	19	26	26	23	19	13	19	12	7	11:00 AM	7	18.2	26	108%
5	214	Commons Beach - lower lot	49	40	42	47	44	33	39	39	37	31	12:00 PM	31	39.1	47	96%
5	217	America's Best Value and Blue Agave lots - all	91	39	40	46	48	52	44	50	45	49	2:00 PM	39	45.9	52	57%
5	218	Pete N Peters, Tahoe City Lumber lots - all	33	11	18	14	17	18	12	14	6	14	11:00 AM	6	13.8	18	55%
5	219	Henrikson Building	71	12	13	18	20	14	19	18	15	19	1:00 PM	12	16.4	20	28%
5	L	SR 28, S-side - Mackinaw to across from Cobblestone	8	3	4	7	6	5	6	5	4	1	12:00 PM	1	4.6	7	88%
5	M	SR 28, N-side - America's Best Value Driveway to Wye - all	24	10	14	14	14	17	15	18	8	14	4:00 PM	8	13.8	18	75%
6	110	Cobblestone - All	104	33	37	63	77	86	72	61	47	35	2:00 PM	33	56.8	86	83%
6	111	Big Tree Center - All	38	31	33	24	29	33	23	21	18	22	11:00 AM	18	26.0	33	87%
6	112	Mother Nature's Inn	9	8	8	7	7	8	7	5	6	6	10:00 AM	5	6.9	8	89%
6	113	Fat Cat Area	21	16	19	17	10	13	9	10	7	6	11:00 AM	6	11.9	19	90%
6	C	SR 28, N-side - Grove to America's Best Value Driveway	29	18	16	23	17	19	25	21	19	21	3:00 PM	16	19.9	25	86%
6	D	SR 28, S-side - Cobblestone to Grove	19	16	17	14	17	13	11	15	16	16	11:00 AM	11	15.0	17	89%
7	114	Grove Street public lot	43	40	43	44	43	43	40	35	39	34	12:00 PM	34	40.1	44	102%
7	115	Grove Street: 28 to Tahoe St - both sides	16	17	17	24	23	23	22	22	18	22	12:00 PM	17	20.9	24	150%
7	116	Lower School Lot	59	56	65	58	58	71	67	58	45	54	2:00 PM	45	59.1	71	120%
7	117	Tahoe Street - Grove Street to Jackpine - both sides	15	7	6	7	8	8	12	10	9	9	3:00 PM	6	8.4	12	80%
7	118	Pioneer Way and Bliss Court (behind Pepper Tree) - all - both sides	34	20	23	22	26	23	32	29	25	21	3:00 PM	20	24.6	32	94%
7	119	Pepper Tree - all - including underground	38	9	11	15	17	21	36	29	38	26	5:00 PM	9	22.4	38	100%
7	120	US Bank	18	2	1	2	2	2	3	2	2	2	3:00 PM	1	2.0	3	17%
7	121	Jackpine Street - 28 to Tahoe St - both sides	23	16	14	22	22	19	22	20	20	20	12:00 PM	14	19.4	22	96%
7	122	Jackpine public lot	40	27	28	36	38	37	35	29	23	23	1:00 PM	23	30.7	38	95%
7	123	County Building lot	30	3	3	3	3	3	4	4	5	4	5:00 PM	3	3.6	5	17%
7	124	Trading Post and Tahoe Rental Group - all	76	13	15	11	14	13	12	13	7	6	11:00 AM	6	11.6	15	20%
7	125	Aviva Inn	25	4	4	5	5	9	14	15	14	15	4:00 PM	4	9.4	15	60%
7	A	SR 28, N-side - E. Town to Jackpine	21	6	7	5	9	8	9	7	7	7	1:00 PM	5	7.2	9	43%
7	B	SR 28, N-side - Jackpine to Grove	16	13	14	15	11	14	14	14	9	11	12:00 PM	9	12.8	15	94%
8	107	Tahoe City Marina	90	62	70	70	69	76	79	72	65	62	3:00 PM	62	69.4	79	88%
8	108	Wolfdales, Keller Williams, TC Sushi, Syd's, etc.	36	16	27	23	25	25	21	23	28	28	5:00 PM	16	24.0	28	78%
8	109	Grove Street, South (lake side) of 28	51	21	31	36	31	20	25	36	31	41	6:00 PM	20	30.2	41	80%
8	E1	SR 28, S-side - Grove to Marina Driveway	12	3	5	5	5	5	7	6	7	5	3:00 PM	3	5.3	7	58%
9	101	Tahoe Gal Parking Area	22	8	4	10	8	8	10	14	13	12	4:00 PM	4	9.7	14	64%
9	102	Lakeside Pizza Area	35	20	22	24	28	31	20	19	21	26	2:00 PM	19	23.4	31	89%
9	103	Post Office Area	135	39	41	61	47	55	43	50	52	58	12:00 PM	39	49.6	61	45%
9	104	Safeway	73	61	64	67	55	54	58	70	70	60	4:00 PM	54	62.1	70	96%
9	105	Tahoe City Inn	28	6	8	10	15	14	15	15	18	19	6:00 PM	6	13.3	19	68%
9	106	Boatworks and Library	163	58	86	110	133	141	130	129	137	137	2:00 PM	58	117.9	141	87%
9	E2	SR 28, S-side - Marina Driveway to E. Town	24	7	10	10	10	11	14	12	13	11	3:00 PM	7	10.9	14	58%
		TOTAL	2586	1241	1437	1616	1734	1793	1755	1682	1479	1356	2:00 PM	1241	1565.9	1793	69%

TABLE A-3: Kings Beach Parking Utilization by Day of Week

Highest Utilization of Area or Zone Shaded

Zone	Area	Area Name	Capacity	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Maximum Utilization
1	101	Safeway	198	115	120	138	124	115	138	182	92%
1	103	Brockway Golf Course	72	44	29	48	42	26	42	44	67%
2	102	North Tahoe Beach	37	40	35	35	37	39	36	43	116%
3	104	Sierra Country Tires	22	8	7	12	14	18	10	16	82%
3	J	SR 28 - N side - Secline to SR 267	10	12	2	4	2	10	12	12	120%
4	106	TransAm Gas Station	6	3	4	4	3	2	4	2	67%
4	107	South Secline Street - all	15	28	10	16	6	7	15	20	187%
5	1	Secline St -- Rainbow to Golden	2	0	0	4	2	0	1	2	200%
5	2	Rainbow Ave -- Secline to Deer	35	12	4	10	10	25	17	27	77%
5	3	Deer St -- Rainbow to Golden	8	0	0	0	0	2	0	1	25%
5	4	Deer St -- SR 28 to Rainbow	9	6	9	9	9	7	11	11	122%
5	154	Tahoe Paddle and Oar - Front, Side, Back	21	7	14	17	4	18	19	20	95%
5	155	Rite Aide	22	5	13	10	14	17	12	8	77%
5	156	Snow Peak Lodge and Ann's Cottages	8	7	12	7	11	11	10	7	150%
5	157	Big 7 Motel and Hiro Sushi	39	9	2	3	7	7	6	4	23%
5	158	Little Bear Cottages	11	9	4	4	4	5	5	7	82%
5	159	Ace Hardware (Secline side - in front of building and lot)	12	0	8	10	10	12	11	9	100%
5	160	Secline W side (across from hardware store)	8	0	3	3	3	5	3	8	100%
5	161	KB Library	8	0	3	2	6	2	2	6	75%
5	162	Front (SR 28 side) of Ace Hardware	4	3	1	7	2	2	0	1	175%
6	108	Brockway - to beginning of Ferrari's	8	11	6	12	5	6	7	21	263%
6	109	Peluso's Area - all strip malls from Secline to motels	22	11	11	15	10	15	11	12	68%
6	110	Gold Crest Motel	18	3	6	6	3	4	7	5	39%
6	111	Ferrari's Crown Resort - front and back	76	55	49	51	51	45	55	54	72%
6	113	Java Hut / Steamers	17	17	12	16	9	9	14	12	100%
6	114	Sun N Sand Lodge	18	5	6	5	5	4	4	14	78%
6	G	SR 28 - S side - Secline to and Including Falcon Lodge	7	2	0	1	6	5	8	4	114%
7	5	Trout Ave -- Deer to Bear	26	11	18	20	20	26	27	24	104%
7	6	Rainbow Ave -- Deer to Bear	14	3	1	4	7	10	24	32	229%
7	7	Bear St -- Rainbow to Golden	8	1	1	1	1	1	2	6	75%
7	8	Bear St -- Trout to Rainbow	6	0	2	2	5	3	4	3	83%
7	9	Bear St -- SR 28 to Trout	20	2	13	10	12	12	14	18	90%
7	149	Tahoe 99 Cent and More (include "Jesus" lot from Bear)	17	4	6	4	9	5	7	5	53%
7	150	Chevron	17	3	4	8	7	6	7	13	76%
7	151	Las Panchitas (front and back)	11	10	5	4	4	10	11	8	100%
7	152	Tahoe Mountain Sports (back lot)	6	4	3	1	1	4	1	4	67%
7	163	Seven Pines Motel	9	5	4	4	5	5	1	3	56%
7	164	Community House	10	4	7	7	8	7	8	6	80%
7	F	SR 28 - N side - Panchitas to Deer	12	0	2	2	6	7	5	6	58%
8	115	North Tahoe Event Center - Front and Side	8	3	2	4	4	3	4	1	50%
8	116	Jason's - Front and Side	13	13	12	15	13	15	20	20	154%
8	117	Jason's - Back (lake side)	21	18	18	14	19	21	19	16	100%
8	118	Kings Beach State Park - main parking	76	17	70	63	65	72	69	72	95%
9	10	Trout Ave -- Bear to Coon, include Sierra Sun Cottages	25	18	18	7	9	10	8	21	84%
9	11	Brook Ave -- Bear to Coon	21	3	15	12	18	12	11	11	86%
9	12	Coon St -- Trout to Rainbow	8	Const.	0	1	3	1	1	0	38%
9	13	Coon St -- Brook to Trout	8	Const.	Const.	Const.	Const.	Const.	Const.	Const.	--
9	14	Coon St -- SR 28 to Brook	2	7	0	6	4	0	Const.	8	400%
9	136	Seven Eleven	13	5	4	4	7	6	4	3	54%
9	138	Grigg's Construction (front) Robin Nest / Well Being Skin Care	8	4	9	12	13	10	9	2	163%
9	139	Grid / China Express	11	12	8	9	15	12	10	8	136%
9	140	Central Market (Brook Ave side)	24	13	15	10	16	22	14	19	92%
9	141	Plumas Bank	14	9	15	8	9	7	5	12	107%
9	142	King Building	16	6	6	7	8	6	10	6	63%
9	144	La Mexicana	8	3	3	4	4	4	4	4	50%
9	146	Brook Ave Public Lot	20	18	17	18	20	20	20	18	100%
9	147	Bank of the West	13	3	5	4	3	6	12	7	92%
9	E	SR 28 - N side - Central Market to Bear	8	9	8	7	3	7	0	3	113%
10	H	SR 28 - S side - Beach Parking entrance to Coon	32	40	8	12	7	33	40	40	125%
11	10.5	Trout Ave -- Coon to Fox	14	12	12	5	6	7	5	14	100%
11	15	Brook Ave -- Coon to Fox	37	8	4	11	5	6	Const.	25	68%
11	16	Salmon Ave -- Coon to Fox	26	12	22	18	25	24	28	27	108%
11	17	Fox St -- Salmon to Brook	13	Const.	Const.	Const.	Const.	Const.	Const.	Const.	--
11	18	Fox St -- SR 28 to Salmon, include by KFC fence	3	3	7	4	6	5	3	3	233%
11	132	North Tahoe Village (Liquor Store)	21	4	9	11	15	10	18	20	95%
11	133	Hospice Thrift and Tattoo Shop	24	13	21	19	24	12	15	12	100%
11	134	Post Office	17	0	4	5	9	7	7	2	53%
11	135	Placer County public health (Clinic)	12	0	11	10	12	11	14	6	117%
11	C	SR 28 - N side - Fox to Coon (roundabout)	10	6	13	11	14	12	14	15	150%
12	21.1	Brockway Vista Ave -- Coon St to Midpoint	17	13	9	6	6	16	15	20	118%
12	120	Coon Street Boat Ramp Area - all along Coon from 28 to water	34	45	35	37	36	38	36	45	132%
12	121	Kayak Shop / Enviro Rents, include Rockwood Tree Service	5	5	12	10	7	13	14	8	280%
12	122	Log Cabin Café, include Sierra Shirts and Shades	11	10	14	10	14	13	16	6	145%
12	123	Subway include Brockway Bakery and Tahoe Cuts Hair Salon	16	4	6	11	8	10	6	15	94%
12	D	SR 28 - S side - Fox to Coon (roundabout)	7	3	8	8	6	8	11	12	171%
13	19	Minnow Ave -- Fox to Chipmunk	7	9	3	3	15	4	4	8	214%
13	20	Chipmunk Ave -- SR 28 to Minnow	15	11	9	3	6	5	11	14	93%
13	128	Caliente	22	10	2	3	3	2	9	22	100%
13	129	Car Wash	17	5	4	4	3	6	5	0	35%
13	130	Minnow Ave Public Parking lot (accessible from 28 also)	22	12	7	8	2	14	19	19	86%
13	A	SR 28 - N Side - Chipmunk to Fox	25	13	7	8	8	10	17	17	68%
14	21.2	Brockway Vista Ave -- Midpoint to Chipmunk	25	20	13	10	8	23	22	29	116%
14	21.5	Chipmunk Ave -- SR 28 to Brockway Vista	5	0	0	0	0	0	0	5	100%
14	124	Char Pit area	10	11	12	5	15	14	14	11	150%
14	125	Stevenson's Holiday Inn	23	3	4	4	5	4	5	21	91%
14	126	Ta-Tel Lodge	13	15	5	4	5	5	6	5	115%
14	127	Launderette (green building)	6	2	3	0	2	3	4	3	67%
14	B	SR 28 - S Side - Chipmunk to Fox	22	6	5	14	11	15	19	15	86%

TABLE A-4: Tahoe City Parking Utilization by Day of Week

Highest Utilization of Area or Zone Shaded

Counts conducted in 2:00 PM Hour (Hour of Peak Overall Demand)

Zone	Area	Area Name	Capacity	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Maximum Utilization
1	224	Gas Stations - both (do not counts cars parked in fueling area)	24	16	30	27	27	20	28	23	125%
1	225	TCPUD - upper lot	52	6	38	35	38	38	34	6	73%
1	226	TCPUD - lower lot	41	0	3	4	3	3	5	0	12%
2	201	64 acres	93	138	99	85	81	52	106	140	151%
2	202	Tahoe City Transit Center	131	50	40	33	18	17	53	100	76%
2	203	Bridgetender	27	32	28	23	22	25	30	25	119%
2	206	64 Acres beach lot (E side of SR 89, S of Bank of the West)	12	12	6	3	1	5	6	14	117%
2	207	Bank of the West	40	34	18	17	15	18	21	44	110%
2	208	Gatekeeper's public parking	59	55	35	53	50	34	41	50	93%
2	J	SR 89, W. Side - 64 Acres turn-out to Fanny Bridge - all	0	0	1	0	0	2	5	0	--
2	K	SR 89, E. Side - Fanny Bridge to 64 Acres turn-out - all	0	1	1	0	1	1	0	3	--
3	209	Visitors Center, including new lot	40	31	15	7	10	12	16	25	78%
3	212	Mackinaw Road - all public and commercial parking	56	45	55	48	50	44	46	29	98%
3	222	Dam Café, River Grill, Gary Davis lots - all	82	38	37	93	90	63	74	77	113%
3	223	Front Street Station, Rafting parking lots - all	45	68	65	33	11	17	32	55	151%
4	210	Willard's Sports	15	11	10	8	11	6	6	6	73%
4	211	Swigard's Hardware	18	8	12	10	13	1	3	6	72%
4	220	Golf Course, Bank of America, Plumas Bank	78	31	48	44	43	45	55	37	71%
4	221	SaveMart	130	75	85	68	80	67	88	89	68%
5	213	SR 28 Public Parking by Commons Beach	24	26	21	18	19	24	21	19	108%
5	214	Commons Beach - lower lot	49	48	46	32	35	32	48	33	98%
5	217	America's Best Value and Blue Agave lots - all	91	63	42	36	35	40	18	52	69%
5	218	Pete N Peters, Tahoe City Lumber lots - all	33	18	9	13	18	9	28	18	85%
5	219	Henrikson Building	71	15	28	28	28	35	36	14	51%
5	L	SR 28, S-side - Mackinaw to across from Cobblestone	8	27	9	20	7	7	7	5	338%
5	M	SR 28, N-side - America's Best Value Driveway to Wye - all	24	21	10	20	15	16	16	17	88%
6	110	Cobblestone - All	104	75	10	94	90	97	91	86	93%
6	111	Big Tree Center - All	38	28	30	32	28	33	33	33	87%
6	112	Mother Nature's Inn	9	4	6	6	5	4	2	8	89%
6	113	Fat Cat Area	21	19	19	18	20	14	16	13	95%
6	C	SR 28, N-side - Grove to America's Best Value Driveway	29	25	26	25	20	24	26	19	90%
6	D	SR 28, S-side - Cobblestone to Grove	19	19	17	12	13	18	18	13	100%
7	114	Grove Street public lot	43	36	35	36	30	31	33	43	100%
7	115	Grove Street: 28 to Tahoe St - both sides	16	30	24	24	19	15	21	23	188%
7	116	Lower School Lot	59	38	5	5	3	0	8	71	120%
7	117	Tahoe Street - Grove Street to Jackpine - both sides	15	12	10	12	9	8	3	8	80%
7	118	Pioneer Way and Bliss Court (behind Pepper Tree) - all - both sides	34	18	21	13	15	21	21	23	68%
7	119	Pepper Tree - all - including underground	38	15	12	18	21	19	14	21	55%
7	120	US Bank	18	4	9	10	11	8	11	2	61%
7	121	Jackpine Street - 28 to Tahoe St - both sides	23	25	21	17	18	21	18	19	109%
7	122	Jackpine public lot	40	33	34	35	28	33	37	37	93%
7	123	County Building lot	30	5	11	9	17	14	10	3	57%
7	124	Trading Post and Tahoe Rental Group - all	76	10	28	38	38	38	49	13	64%
7	125	Aviva Inn	25	5	2	6	8	8	6	9	36%
7	A	SR 28, N-side - E. Town to Jackpine	21	9	12	10	7	4	12	8	57%
7	B	SR 28, N-side - Jackpine to Grove	16	12	12	14	8	12	11	14	88%
8	107	Tahoe City Marina	90	85	56	51	72	74	69	76	94%
8	108	Wolfdales, Keller Williams, TC Sushi, Syd's, etc.	36	17	20	17	24	19	18	25	69%
8	109	Grove Street, South (lake side) of 28	51	24	12	27	38	34	44	20	86%
8	E1	SR 28, S-side - Grove to Marina Driveway	12	7	4	5	5	5	8	5	67%
9	101	Tahoe Gal Parking Area	22	9	10	6	13	14	13	8	64%
9	102	Lakeside Pizza Area	35	21	24	28	23	34	41	31	117%
9	103	Post Office Area	135	32	41	40	38	29	38	55	41%
9	104	Safeway	73	55	70	65	54	60	68	54	96%
9	105	Tahoe City Inn	28	10	9	14	13	13	12	14	50%
9	106	Boatworks and Library	163	158	104	95	134	138	127	141	97%
9	E2	SR 28, S-side - Marina Driveway to E. Town	24	13	9	9	11	9	15	11	63%
		TOTAL	2586	1722	1494	1549	1554	1484	1716	1793	69%
		Percent Total		67%	58%	60%	60%	57%	66%	69%	
Subtotal by Area											
1	117	TCPUD; Gas Stations -- West TC	117	22	71	66	68	61	67	29	61%
2	362	64 Acres -- South TC	362	322	228	214	188	154	262	376	104%
3	223	Tahoe City 'Wye' Area	223	182	172	181	161	136	168	186	83%
4	241	Savemart Area	241	125	155	130	147	119	152	138	64%
5	300	Mid-Tahoe City, Commons Beach	300	218	165	167	157	163	174	158	73%
6	220	Cobblestone to Grove Street	220	170	108	187	176	207	186	172	94%
7	454	North of SR 28, Grove Street Properties and East	454	252	236	247	232	215	254	294	65%
8	189	Tahoe City Marina Area	189	133	92	100	139	132	139	126	74%
9	480	Safeway, East TC, South of SR 28	480	298	267	257	286	297	314	314	65%

APPENDIX B
DETAILED PARKING DEMAND TABLES

TABLE B-1: Kings Beach Existing Land Use Inventory by Assessor's Parcel Number

Zone	APN	Business	Existing Land Use	Total Building (KSF)	# of Units		Open During Counts?	% Occupied	Actual Building Utilized (KSF)	Actual # of Units Occupied
1	117160018000	Safeway	Supermarket	38.584			y	100%	38.584	
2	117180023000	--	Public Park	2.088			y	100%	2.088	
3	117180006000	Sierra Tire	Service Station	2.925			y	100%	2.925	
3	117180053000	Sierra Tire and Offices	Service Station and Office	0.832			y	100%	0.832	
4	117180012000	Trans-Am Gas	Gas Station and Mini-Market	1.565			y	100%	1.565	
5	090071005000	Big 7 Motel	Motel		16	Rooms	y	100%		16
5	090071017000	Ann's Cottages	Motel		8	Rooms	y	100%		8
5	090071019000	Hiro Sushi	Motel and Restaurant		9	Rooms	y	100%		9
5	090071021000	--	Multifamily Residential		4	MFDU	y	100%		4
5	090071022000	Little Bear Cottages	Motel and Office		7	Rooms	y	100%		7
5	090071023000	Little Bear Cottages	Multifamily Residential		8	MFDU	y	100%		8
5	090071030000	Rite-Aid	Commercial	5.488			y	100%	5.488	
5	090071033000	Snow Peak Lodge	Motel		13	MFDU	y	100%		13
5	090071035000	Ace Hardware and Offices	Commercial, Office, Medical/Dental Office	11.641			y	100%	11.641	
5	090071036000	Tahoe Dave's	Retail Commercial	1.242			y	100%	1.242	
6	090072002000	Motel California	Motel		9	Rooms	y	100%		9
6	090072003000	KB Games	Beauty Salon and Retail Commercial	1.002			y	100%	1.002	
6	090072004000	NaturaMed	Medical Office	2.546			y	100%	2.546	
6	090072006000	Gold Crest Motel	Motel		13	Rooms	y	100%		13
6	090072009000	Gold Crest Motel	Motel		5	Rooms	y	100%		5
6	090072017000	Professional Offices	Office	1.147			y	100%	1.147	
6	090072024000	A'Pizza Bella	Restaurant	1.964			y	50%	0.982	
6	090072026000	Sun-n-Sand Motel	Motel		28	Rooms	y	100%		28
6	090072027000	Ferrari Crown Motel	Motel		25	Rooms	y	100%		25
6	090072028000	Falcon Lodge	Vacant		26	Rooms	n	0%		0
6	090072029000	Java Hut and Residences	Restaurant/Coffee Shop and...	5.256	6	MFDU	y	100%	5.256	6
6	090072030000	Steamer's	Restaurant	2.631			y	100%	2.631	
6	090073005000	Gold Crest Motel	Motel		12	Rooms	y	100%		12
6	090073006000	Ferrari Crown Motel	Motel		10	Rooms	y	100%		10
6	090073007000	Ferrari Crown Motel	Motel		6	Rooms	y	100%		6
7	090074008000	7 Pines Motel	Motel		12	Rooms	y	100%		12
7	090074026000	Residential	Multifamily Residential		10	MFDU	y	100%		10
7	090075002000	North Shore Flooring	Commercial	0.735			y	100%	0.735	
7	090075010000	--	Multifamily Residential		1	MFDU	y	100%		1
7	090075014000	Tahoe 99 Cent and More	Retail Commercial and Office	7.5			y	100%	7.500	
7	090075016000	Auto Repair	Auto Repair	2.565			y	0%	0.000	
7	090075017000	Chevron	Gas Station and Mini-Market	1.653			y	100%	1.653	
7	090075018000	Las Panchitas	Restaurant and Residential	4.716	10	MFDU	y	100%	4.716	10
7	090075019000	--	Multifamily Residential		2	MFDU	y	100%		2
7	090075025000	Tahoe Mountain Sports	Retail Commercial	2.4			y	100%	2.400	
7	090075026000	--	Vacant	3.198			n	0%	0.000	
8	090080001000	Jason's	Restaurant and Retail Commercial	3.993			y	100%	3.993	
8	090080002000	A Drift Tahoe	Retail Commercial	2.049			y	100%	2.049	
8	090080018000	North Lake Tahoe Conference Center	Conference Center	N/A			y	100%		
9	090122010000	Professional Offices	Office	3.526			y	100%	3.526	
9	090122014000	--	Multifamily Residential		5	MFDU	y	100%		5
9	090122017000	--	Vacant	2.88			y	0%	0.000	
9	090122021000	--	Multifamily Residential		6	MFDU	y	100%		6
9	090122038000	La Mexicana	Restaurant and Residential	5.303			y	100%	5.303	5
9	090122039000	--	Multifamily Residential		5	MFDU	y	100%		5
9	090123006000	The Grid	Restaurant and Multifamily Residential	6.054	12	MFDU	y	100%	6.054	12
9	090123008000	Griggs Custom Homes	Office	3.18			y	100%	3.180	
9	090123009000	Rainbow Doorways and Wellbeing Massage	Retail Commercial and Massage	3.84			y	100%	3.840	
9	090123010000	Robin's Nest	Retail Commercial	2.103			y	100%	2.103	
9	090123015000	Lakeview Threads	Retail Commercial	2.266			y	100%	2.266	
9	090123016000	Lake Tahoe Bike and Ski	Retail Commercial	3.32			y	100%	3.320	
9	090123017000	--	Vacant	1.08			y	0%	0.000	
9	090123018000	China Express	Restaurant	1.44			y	100%	1.440	
9	090123024000	Plumas Bank	Bank	1.205			y	100%	1.205	
9	090123026000	Central Market	Specialty Food Market	4.333			y	100%	4.333	
9	090123027000	Taco Bell	Office and Fast Food	2.438			y	100%	2.438	
9	090123028000	7-11	Mini Market	2.164			y	100%	2.164	
9	090123031000	King's Café	Office and Restaurant	5.68			y	100%	5.680	
11	090126014000	US Postal Service	Post Office	4.263			y	100%	4.263	
11	090133003000	Lucky 7 Tattoo	Commercial and Multifamily Residential	1.184	2	MFDU	y	100%	1.184	2
11	090133005000	Kings Beach Liquor	Government Offices, Commercial Store, Beauty Salon, Residential	9.748	2	MFDU	y	100%	9.748	2
11	090133008000	--	Multifamily Residential		2	MFDU	y	100%		2
11	090133012000	Kings Beach Mini Golf	Mini Golf	0.544			y	100%	0.544	
11	090133015000	Hot Diggity Dog and Cat	Retail Commercial	1.122			y	100%	1.122	
11	090133016000	Sugar Pine Gifts	Commercial and Residential	3.843	1	MFDU	y	100%	3.843	1
11	090133019000	--	Vacant	1.533			n	0%	0.000	
11	090133021000	Tahoe Forest Hospice Gift Shop	Retail Commercial, Office and Medical Office	4.832			y	100%	4.832	
12	090134002000	Tahoe Eco Sports	Retail Commercial	2.818			y	100%	2.818	
12	090134005000	Rockwood Tree Service and Hooked on Fishing	Office and Commercial	3.011			y	100%	3.011	
12	090134011000	Brockway Bakery	Bakery and Residential	3.774			y	100%	3.774	
12	090134039000	Log Cabin	Restaurant	4.326			y	100%	4.326	
12	090134043000	Log Cabin	Restaurant		1	MFDU	y	100%		1
12	090134048000	Subway, Chiropractic Office, Tahoe Cutting Co.	Restaurant, Medical Office, Hair Salon	2.779			y	75%	2.084	
13	090192001000	Front Porch	Retail Commercial and Hair Salon	1.997			y	100%	1.997	
13	090192002000	--	Vacant	3.228			n	0%	0.000	
13	090192003000	--	Residential		1	MFDU	y	100%		1
13	090192004000	Tacos Jalisco	Restaurant and Residential	1.512	6	MFDU	y	100%	1.512	6
13	090192031000	Lake Tahoe Specialty Stove and Fireplace	Retail Commercial	2.78			y	100%	2.780	
13	090192037000	Jai Yen	Retail Commercial	0.951			y	100%	0.951	
13	090192056000	Caliente	Restaurant	4.237			y	100%	4.237	
13	090192057000	Car Wash	Car Wash	2.648			y	100%	2.648	
14	090142007000	Laundrette and New Leaf Accupuncture	Laundromat, Medical Office, Residential		3	MFDU	y	100%		3
14	090142023000	Stevenson's Holiday Inn	Motel		23	Rooms	y	100%		23
14	090142024000	Lighting Showroom	Retail Commercial	1.95			y	100%	1.950	
14	090142025000	Char-Pit	Restaurant	0.96			y	100%	0.960	
14	090142026000	Ta-Tel Lodge	Motel		10	Rooms	y	100%		10

TABLE B-2: Tahoe City Existing Land Use Inventory by Assessor's Parcel Number

Zone	APN	Business	Assessor Land Use Category	Existing Land Use	Total Building (KSF)	# of Units		Open During Counts?	% Occupied	Actual Building Utilized (KSF)	Actual # of Units Occupied
1	094190025000	Shell	Mini-Market with Gas	Gas Station	2.06	–		Yes	100%	2.1	
	094540013000	TCPUD		Office	11.00	–		Yes	100%	11.0	
1	094190021000	Chevron	Service Station	Gas Station	1.64	–		Yes	100%	1.64	
2	094540020000	Bank of the West	Banks, S&L's, Credit Union	Bank	9.59	–		Yes	100%	9.59	
2	094540025000	Bridgetender	Restaurants, Cocktail Lounges	Restaurant	2.69	–		Yes	100%	2.69	
2	094540019000	–	Vacant (PG&E)	Vacant	–	–		No		–	
2	094540026000	–	Vacant (TCPUD)	Vacant	–	–		No		–	
2	094180065000	–	Vacant (USFS)	Vacant	–	–		No		–	
3	094190007000	Real Estate	Commercial Store	Office	3.12	–		Yes	100%	3.12	
3	094190032000	NLTRA Visitor Center	Commercial Store	Office	5.89	–		Yes	100%	5.89	
3	094190004000	Truckee River Raft Co.	Miscellaneous Commercial	Commercial	1.23	–		Yes	100%	1.23	
3	094190011000	–	Vacant, Commercial	Vacant	–	–		No		–	
3	094190016000	Professional Offices	Miscellaneous Commercial	Office	2.45	–		Yes	75%	1.84	
3	094540024000	Front Street Pizza	Miscellaneous Commercial	Restaurant	1.61	–			100%	1.61	
3	094190006000	Gary Davis Group, Offices	Office General	Office	4.71	–		Yes	100%	4.71	
3	094190015000	Dentist office	Office General	Medical Office	1.97	–		Yes	100%	1.97	
3	094540023000	Dam Café, Offices, etc.	Suburban Store	Restaurant and Office	6.68	–		Yes	100%	6.68	27.0
4	094540010000	Bank of America	Banks, S&L's, Credit Union	Bank	5.26	–		Yes	100%	5.26	
4	094190012000	Willard's Sport Shop	Commercial Store	Retail Commercial	2.78	–		Yes	100%	2.78	
4	094190013000	Swigards	Commercial Store	Commercial	5.24	–		Yes	100%	5.24	
4	094540009000	SaveMart	Commercial Store	Supermarket	29.72	–		Yes	100%	29.72	
4	094540004000	Bechdolt Building	Office General	Bank, Office and Hair Salon	10.65	–		Yes	75%	7.99	
5	094070001000	Henrikson Bldg – Thai Restaurant, Burrito Window	Commercial Store	Restaurant, Massage, Office, Retail Commercial	14.47	–				6.57	
5	094070003000	Market 28	Commercial Store	Specialty Food Market	0.60	–		Yes	100%	0.60	
5	094070004000	North Lake Auto Parts	Commercial Store	Commercial and Office	2.41	–		Yes	100%	2.41	
5	094070006000	Za's; Pete n Peters; Wanda's Florist	Commercial Store	Restaurant, Retail Commercial	7.24	–		Yes	90%	6.52	
5	094070008000	SkyLodge Center	Commercial Store	Retail Commercial and Office	4.79	–		Yes	100%	4.79	
5	094070005000	Truckee-Tahoe Lumber	Heavy Industrial	Commercial	10.35	–			100%	10.35	
5	094070010000	America's Best Value Inn	Hotels, Motels, Resorts	Motel	16.22	49	rooms	Yes	100%	16.22	49
5	094070007000	The Store	Restaurants, Cocktail Lounges	Retail Commercial and Office	3.54	–		Yes	100%	3.54	
5	094070009000	Blue Agave and Professional Offices	Restaurants, Cocktail Lounges	Restaurant and Office	16.20	–		Yes	100%	16.20	
5	094070002000	Henrikson Bldg – Jiffy's Pizza	Suburban Store	Office, Commercial, Restaurant	9.07	–		Yes	10%	0.77	
6	094080005000	Mother Nature Inn and Retail below	Commercial Store	Retail Commercial and Bed&Breakfast	6.38	–		Yes	100%	6.38	
6	094080009000	Any Mountain	Commercial Store	Retail Commercial	6.44	–		Yes	100%	6.44	
6	094080012000	Lakeview Spirits, Fat Cat, Thrift Store	Commercial Store	Commercial and Restaurant	5.51	–		Yes	100%	5.51	
6	094080004000	Rosie's	Restaurants, Cocktail Lounges	Restaurant	6.01	–		Yes	100%	6.01	
6	094080011000	Waffle Shop, Zia Lina, Massage, Offices	Restaurants, Cocktail Lounges	Restaurant, Massage and Office	5.47	–		Yes	80%	4.38	
6	094090048000	Christy Hill	Restaurants, Cocktail Lounges	Restaurant	1.75	–		Yes	100%	1.75	
6	094070011000	Cobblestone	Shopping Center	Office, Retail Commercial, Restaurant, Movie Theater	30.61	–		Yes	90%	27.55	
6	094070014000	Cobblestone East	Suburban Store	Retail Commercial, Medical Office, Office, Nail Salon	8.58	–		Yes	100%	8.58	
6	094080003000	Fuller Bldg – Blanca's Boutique, Massage on the Lake	Suburban Store	Retail Commercial, Office, Massage	3.64	–		Yes	100%	3.64	
6	094080010000	Big Tree Center	Office General	Office, Laundromat, Commercial	10.00	–		Yes	100%	10.00	
7	094110024000	US Bank	Commercial Store	Bank	11.24	–		Yes	100%	11.24	
7	094110009000	Peppertree	Hotels, Motels, Resorts	Motel	18.61	47	rooms	Yes	100%	18.61	47
7	094110021000	Custom's House – Placer County, O'Dell Mortgage	Commercial Store	Government Offices and Office	13.53	–		Yes	100%	13.53	
7	094130004000	Aviva Inn	Hotels, Motels, Resorts	Motel	8.80	25	rooms	Yes	100%	8.80	25
7	094110001000	Professional Offices	Office General	Office	3.14	–		Yes	100%	3.14	
7	094110010000	Professional Offices	Office General	Office	0.48	–		Yes	100%	0.48	
7	094110016000	Professional Offices and Residence	Office General	Office and Residential	1.68	1	mfdu	Yes	100%	1.68	1
7	094130001000	Professional Offices	Office General	Office	3.28	–		Yes	100%	3.28	
7	094130007000	Tahoe Forest PT, Tahoe Athletic Club, Medical Offices	Office General	Office, Medical Office, Health Club	20.72	–		Yes	60%	12.43	
7	094130008000	Sawtooth Ridge	Restaurants, Cocktail Lounges	Vacant	3.91	–		No	0%	0.00	
8	094090012000	Olympic bike shop	Commercial Store	Retail Commercal	1.64	–		Yes	100%	1.64	
8	094090041000	Wolfdales	Restaurants, Cocktail Lounges	Restaurant	2.83	–		Yes	100%	2.83	
8	094090047000	Syd's, Tahoe Dave's	Restaurants, Cocktail Lounges	Restaurant, Retail Commercial	8.68	–		Yes	100%	8.68	
8	094090011000	Tahoe Dave's, Bove Blow Dry Salon and Misc Office	Suburban Store	Retail Commercial, Office, Hair Salon	7.97	–		Yes	100%	7.97	
8	094090060000	Professional Offices	Office General	Office	1.60	–		Yes	100%	1.60	
8	094090052000	Gear and Grind, Clearwater Day Spa, Tahoe City Sushi	Commercial Store	Restaurant and Massage	3.06	–		Yes	100%	3.06	
9	094090035000	Tahoe City Library	Miscellaneous Commercial	Library	3.38			Yes	100%	3.38	
9	094090001000	Tahoe City Inn	Hotels, Motels, Resorts	Motel	13.79	30	rooms	Yes	100%	13.79	30
9		Tahoe City Marina	Marina, Pier	Marina and Associated Slips and Bouys	–	282	slips & buoys	Yes	100%	–	282
9	094090063000	Tahoe City Marina	Restaurants, Cocktail Lounges	Office, Retail Commercial, Restaurant	37.39	–		Yes	85%	31.78	
9	094090036000	El Dorado Bank, Professional Offices	Office Condominium	Bank and Office	5.31	–		Yes	100%	5.31	
9	094090029000	Boatworks	Shopping Center	Restaurant, Retail Commercial, Hair Salon	38.40	–		Yes	85%	32.64	
9	094110018000	Safeway, A Sante, Lakeside Pizza, Misc. Offices	Suburban Store	Supermarket, Fitness Center, Office, Restaurant, Spa	50.03	–		Yes	100%	50.03	
9	094110019000	US Postal Service, Better Homes and Gardens	Suburban Store	Post Office and Office	10.50	–		Yes	35%	3.68	

Bibliography

City of Aspen, Colorado. "Westside Cities Livable Communities: Parking Subtask 3.A," page 45-46, 1995.

Economic & Planning Systems, Inc. "Economic & Redevelopment Strategies for Kings Beach and Tahoe City," Final Report, prepared for Placer County Redevelopment Agency. June, 2007.

Edwards, John D. *The Parking Handbook for Small Communities.* Washington D.C., National Trust for Historic Preservation and Institute of Transportation Engineers, 1994.

Fein, Geoff S. "Council Oks Parking Fee for Downtown Merchants," *Palo Alto Daily News*, March 20, 2001.

Freshtracks Communications. "Community Outreach Summary Report": Tahoe City Golf Course Property. Spring, 2013.

Gordon H Chong & Partners, and Walker Parking Consultants. "Tahoe City Public Parking Facilities Construction Development Program," Final Draft. November, 2001.

Institute of Transportation Engineers. *Parking Generation*, Fourth Edition. Washington D.C., 2010.

International Parking Institute. *Parking 101: A Parking Primer.* Virginia, (n.d.).

Jia, Wenyu and Martin Wachs. *Parking and Affordable Housing*, Access, Vol. 13, No. 3:22-25, 1997.

Kodama, Michael R. and Dr. Richard Wilson. "Technical Report Westside Cities Subregion Livable Communities (Parking Subtask 3.A)," Westside Cities Subregion and Meyer Mohaddes Associates, April 20, 2000.

LSC Transportation Consultants, Inc. "Kings Beach Commercial Core Parking Study," Technical Memorandum Number One: Evaluation of Existing and Future Conditions, prepared for Harding Lawson Associates. July 5, 2000.

LSC Transportation Consultants, Inc. "Tahoe/Placer County Parking Improvement District Study," Public Draft Report, prepared for Placer County Redevelopment Agency. May 4, 2006.

NuStats. "Winter Visitors Travel Survey," Summary of Results, prepared for Tahoe Regional Planning Agency, Final Report. April, 2004.

Osborn, Lynn. "Parking Management Programs as Effective TDM Land Use Strategies,"

Contra Costa Commute Alternative Network. Walnut Creek, California, September 2003.

Park City, Utah. (n.d.). *Municipal Code / Land Management Code.* Retrieved July 1, 2014, from http://www.parkcity.org

Shoup, Donald C. "In Lieu of Required Parking," *Journal of Planning Education and Research* 18:307-320, 1999.

Shoup, Donald C. "Instead of Free Parking," Access, Vol. 15, No. 2:6-9, http://www.uctc.net/ access/access15.pdf, 1999.

Shoup, Donald C. "The Trouble with Minimum Parking Requirements," Transportation Research Record, Part A, Vol. 33:549-574, 1999.

Smith, Thomas P. *Flexible Parking Requirements*, American Planning Association, Planning Advisory Service Report No. 377. August, 1983.

Sterling Codifiers, Inc. (n.d.). *Codebook.* Retrieved July 1, 2014, from http://www.sterlingcodifiers.com

Tahoe Regional Planning Agency. "Lake Tahoe Region of Placer County, North Tahoe Community Plans," Appendix A – Parking Demand Table, Appendix B – Standards and Guidelines for Signage, Parking and Design, Appendix C – Allocation Guidelines, adopted April 30, 1996.

Town of Davie, Florida. "Payment In-Lieu-of Parking for Residential and Non-Residential Uses," Davie Town Hall, 6591 Orange Drive, Davie, Florida, 33314, 2003.

Town of Mammoth. (n.d.). *Municipal Code / Land Management Code.* Retrieved July 1, 2014, from http://www.ci.mammoth-lakes.ca.us

Town of North Elba. (2011, January 1). *Lake Placid / North Elba Land Use Code.* Retrieved July 1, 2014, from http://www.northelba.org

Town of Truckee. (Amended 2013, September 13). *Truckee Municipal Code - Title 18, Development Code, Chapter 18.48 – Parking and Loading Standards.* Retrieved July 1, 2014, from http://www.townoftruckee.com

Transportation Research Board. "Parking Management and Supply: Traveler Response to Transportation System Changes," *TCRP Report 95*, Transit Cooperative Research Program sponsored by the Federal Transit Administration. Washington D.C., 2003.

Urban Land Institute. *Shared Parking*, Second Edition. Washington D.C., 2005.

Urban Land Institute. *The Dimensions of Parking*, Fourth Edition. Washington D.C., 2000.

Urban Land Institute. *The Dimensions of Parking*, Fifth Edition. Washington D.C., 2010.

Victoria Transport Policy Institute. "Parking Management," Strategies for More Efficient Use of Parking Resources, Victoria Transport Policy Institute, 1250 Rudlin Street, Victoria, B.C., V8V 3R7, Canada, May 9, 2005.

Weant, Robert A. and Herbert S. Levinson. *Parking*, Eno Foundation for Transportation, P. O. Box 2055, Westport, Connecticut, 06880, 1990.